

TO: Board of Directors

FROM: Kevin Desmond, Chief Executive Officer

DATE: August 12, 2020

SUBJECT: Public Delegation at the June 18, 2020 Board of Directors Meeting

EXECUTIVE SUMMARY

The Board received four public delegations at its June 18, 2020 open Board meeting. Management responded to the delegation during the meeting.

On June 18, 2020, the Board received four public delegations on the following topics:

- **Bus Service in Stanley Park**
 - Three delegates spoke in favour of restoring or providing additional bus service within Stanley Park. The delegates noted this would support reducing carbon emissions through a reduction of personal vehicles within Stanley Park and would increase access for those otherwise not able to travel throughout the park.
 - Management responded verbally to confirm that TransLink has been in discussions with the City of Vancouver on this topic. Bus service is currently fully deployed in support of the Province's BC Restart Plan resulting from the COVID-19 pandemic, and the addition of a new bus service in Stanley Park would require re-deployment from other existing services. Management will continue to explore this as a potential new future bus route with City of Vancouver staff.
- **Advocating for Public Transit**
 - The delegate shared with the Board their support for TransLink and public transit, the enhancement of TransLink's profile as a leader in the transit community, and additional funding for transit services to support the re-start of the BC economy due to COVID-19. The delegate also advocated for diversity, equity and inclusion initiatives in transit organizations.



TransLink Strategic Priority: Implement the Mayors' Vision

Fleet and Infrastructure

Phase 2 Mark III status update:

In Q2, Bombardier's testing of Train 14 was conducted and completed at their Kingston facility and shipped to BCRTC's operations and maintenance centre in July. This train represents the final vehicle of the Phase 2 Mark III procurement order.

Trains 9-13 continued to progress through various stages of network commissioning in Q2 with two trains in stage 3 testing which involves operating in full revenue service with passengers. Up to the end of June, BCRTC has fully commissioned eight trains of this order and has a total of 17 Mark III trains in revenue service.

Modernize infrastructure to increase capacity and accommodate growth

With future network expansion on the horizon and the expected ridership growth that SkyTrain is likely to experience with it, it is vital to modernize the system's infrastructure to ensure resiliency and reliability of the transit service BCRTC provides.

- In Q2, rail and rail pad replacement project work continued in the eastbound track area between 22nd Street to New West Station. The project was able to replace 4,700 metres of rail and 8,300 rail pads. Rails pads are used to fasten and support running rail to the guideway and helps to reduce shock and vibration on the system. Running rail and rail pad replacement work is critical to the resiliency and reliability of SkyTrain's rail infrastructure.
- Work continued for a new Operations Control Centre (OCC) to be located next to OMC2. In Q2, the building permit application passed first and second reading at the City of Burnaby.

Elevating Devices

The Expo Line Escalator Replacement program progressed successfully in Q2. When finished this project will replace 37 escalators at 13 Expo Line stations by the end of 2023. Replacing escalators on the Expo Line is critical maintenance to accommodate the four-fold increase in ridership since these devices were installed over 30 years ago. These new, heavier-duty escalators will be able to accommodate higher passenger volumes and improve their safety and reliability. This critical investment in the system, part of TransLink's Maintenance and Repair Program, will enhance the customer experience well into the future.

- Work at Granville station to replace its six escalators was substantially completed in Q2. An official opening occurred in July. This project includes the longest escalators in Metro Vancouver.
- Work began to replace the the lower escalator (street to ticketing level) at Gateway station. The timeline to complete for this escalator is approximately six months, at which time the project will begin work on the second escalator (ticketing to platform level).
- In April, escalator replacement work began at Columbia Station. It is anticipated that this project will be completed in Q4 2020.
- Work began to upgrade the pair of escalators to the east side of Waterfront station on May 11. This work will take approximately six months to complete, with new escalators ready for late 2020. The COVID-19 pandemic has allowed the project team to bring the Waterfront replacement

forward, allowing for work in this station to progress ahead of schedule with no extra cost and limited impact to passengers.

Fleet expansion and management

- The Request for Proposal stage of the SkyTrain fleet expansion project for 205 more train cars closed in Q2. The bids are currently being reviewed by the project team.

Implementation of McNeil recommendations

- The OMC1 power system upgrade project continued in Q2 with the completion of the building expansion and equipment installation. This project reduces the risk of service disruptions by upgrading aging power equipment, while also improving resiliency and system continuity redundancies for critical system elements, which was a key recommendation within the McNeil report.
- Support for the Enterprise Asset Management Program project continued in Q2. Within the Operations department, integration planning is underway for new work permitting software which will be used for planning, scheduling, execution of work permits, and track access requirements for capital and maintenance activities. Implementation is expected in Q4 2020.

TransLink Strategic Priority: Maintain a State of Good Repair

Safety, Environment and Emergency Management

Employee and passenger safety on our system and in our workplace continue to be a top priority of BCRTC. Zero Harm and Just Culture continues to be a focus of the department with an initial focus on Just Culture, which is a values-supportive system of shared accountability.

- New Safety Dashboard was created to ensure on time accurate information that can be accessible to all key stakeholders. The dashboard is an effective tool to track our key performance indicators at all levels of the organization.
- As part of BCRTC's Energy Management Program (established in Q1), an Energy Management working group has been formed, an Energy Management Policy was created and approved, recommendations from the Q1 energy scan/audit have been compiled into an opportunity register with a month-by-month schedule for implementation, and monthly meetings are occurring to track progress against the energy targets.
- The new service level agreement for prime contractor obligations was implemented. Training has been developed and has been delivered to all key stakeholders.
- A number of key safety programs have been identified for development to continue to support the overall Safety Management System (SMS). The programs include: Hot Work, Contractor Management, Investigation Methodology, and Accessing Automatic Train Control.
- BCRTC completed research and gap analysis to support a best practice fatigue management program in line with the Technical Safety BC (TSBC) guidelines. Initial engagement with stakeholders has begun.
- BCRTC's Safety Rule Book was reviewed to ensure it is consistent with Technical Safety BC's requirements. This is part of the integration of TSBC's updated SMS requirements into BCRTC's SMS. The department is at the initial stages of identifying the specific updates required from the TSBC's SMS and the implications to BCRTC's SMS and Safety Rule Book.

- A review of the Joint Health and Safety Committee occurred and recommendations have been made to BCRTC's executive leadership team to update the format and governing processes to enhance its effectiveness.

Lost Time Incidents (LTI)

In Q2 there were seven LTI claims accepted by WorkSafeBC, compared to 10 the previous quarter. Year-to-date BCRTC has recorded 17 LTI claims compared to 29 in the same period of 2019.

The 2020 injury rate continues to show improvement over the past three years and is 44.7% lower compared. The focus on Zero Harm will continue to enforce messages to take care of each other, follow process, and not take shortcuts that can put people in harm's way. In response to COVID-19, BCRTC departments have created their Business Continuity Plan, so that we can continue our operations with a focus on employees' safety during the pandemic.

Physical assaults on employees

The physical safety of our employees is the company's top priority. The foundations for a zero harm workplace have been laid out for our customer-facing staff. There were four physical assaults on staff in Q2 2020, bringing the YTD total to nine. The YTD assaults per 200,000 hours worked rate of 2.0 is 28.3% lower than 2019's rate of 2.8 for the same period.

- BCRTC Security Committee and Transit Security will continue to mitigate workplace violence against our staff. This includes training frontlines staff on conflict resolution, engaging with Transit Police to identify areas of concern, and "Be on the lookout for" bulletins.
- The Safety and Security departments are working together to ensure the right department is investigating assault incidents and measures are taken, including a deeper look at trending issues.

Passenger Injury rate

- EM passenger injuries per million boarded passengers was down 17.1% compared to the first quarter of 2020. There were only four reported injuries in Q2, the lowest quarterly result since 2011. The injury rate of 0.63 pmbp for the quarter is well below the target of 1.0 pmbp target rate per million boarded passengers. Reduced ridership has played a factor in the lower injury rate this quarter.
- BCRTC's Passenger Injury Task Force continues to meet quarterly to review progress, trends, areas of concern, and opportunities for improvement. Safety initiatives are being implemented at the top three passenger injury stations, including using the HyperSpike speaker to deliver specific messages to passengers.

Maintenance

Despite the constraints of physical distancing, the important work of maintaining and repairing trains, track, systems and infrastructure by our rolling stock and guideway teams continued in Q2. In some cases, productivity (especially with inspection of trains) was able to improve due to reduce service implemented in March. For example, percentage of hours allocated to preventative maintenance activities in Q2 increased 55% from Q1 of 2020.

Railway infrastructure maintenance activities this quarter:

Replacements:

- Turnout components were replaced near King George station. Replaced components at this location included the curve point and straight stock rails
- Running rail slid joints near Scott Road station on the inbound and outbound track

Grinding:

- 10 switches

Other:

- 38 track sections of linear induction motor (LIM) rail lowered

Rolling stock maintenance activities this quarter:

Replacements:

- 691 wheelsets lathed/turned
- 24 door operators (6 cars) changed out
- 61 wheelsets changed out
- Six trucks changed out

Inspections:

- 556 train cars inspected. Inspections are performed every 20,000 kilometres

MK I refurbishment:

- Mark I train refurbishment project should be completed by October 2020. All 114 train cars are complete with the exception of six door upgrades that will be completed when parts are available.

Capital & Major Business

State of good repair

- Construction work began in Q2 to develop unfinished space at OMC 1 into workspace. Originally slated to start in Q1 but delayed due to COVID-19, this project will create more workstations and flex space needed to support growth and future expansion.

Continuous Improvements

Performance Reporting

- In Q2, the Performance Reporting team piloted Phase I of its real time reporting dashboard to executives. Together with Operations Planning, a dashboard was developed that shows the status of our system by providing statistics on headway delays and each platform's longest service gap and is automatically refreshed every 30 minutes. The dashboard also provides hourly performance tables, which lets you explore individual trains' actual performance.

TransLink Strategic Priority: Enhance Customer Experience

Expo and Millennium SkyTrain Service

Due to COVID-19 measures recommended by the Public Health Officer, SkyTrain ridership was significantly impacted. With less passengers on the system, on-time performance (OTP) and service availability was hardly affected by passengers-related delays.

Service delivery

- In Q2, BCRTC delivered 99.8% of scheduled service which was above the target of 99.7%

On-time performance

- Q2 OTP of 97.2% was above the target of 96.5%. YTD OTP continues to be lower than target due to the extreme weather event in January. However, each month has seen a rebound closer to performances we have been delivering for the past several years. The month of April was the highest on record with 98.4%, followed by June (97.1%) and May (96.0%).
- June 2 was BCRTC's most successful day of the quarter with 100% service delivery and 99.6% OTP.

SkyTrain service delays

- There were 12 service incidents in the 16-30-minute delay category in Q2, consistent with target. The main causes for delays were issues with train doors, guideway components, train propulsion and track intrusions.
- There were six delays over 30 minutes in Q2 compared to 28 in Q1.
- In total, SkyTrain experienced 18 delays this quarter, which is 27 less delays compared to the first quarter of 2020.

COVID-19 Related Service Reduction

In Q2 service reductions continued on SkyTrain, West Coast Express and Canada Line. After the Province adopted Stage 3 of its COVID response, service on all three rail services increased to reflect expected rise in ridership as COVID measures were relaxed.

- April 22nd to May 18th (60% pre-COVID car-km): EM service was reduced at all times except late evenings Sunday to Thursday.
- May 19th to May 24th (90% pre-COVID car-km): EM peak service reduced by about 18%, and late evening service on Friday and Saturday nights reduced to be the same as Sunday to Thursday nights.
- From May 25th: EM service returned to 100% pre-COVID levels. Minor change was made on June 24 to remove AM peak “extra” Commercial–Broadway to Waterfront trains.
- Canada Line – Peak service reduced to 16 trains from 20.
- West Coast Express – From April 22, Trains One, Three, and Five continued on existing schedules with a reduction in number of train cars to reflect lower ridership. Trains Two and Four remain suspended.

Ridership

SkyTrain ridership continues to be below the totals experienced prior to the physical distancing and essential travel measures put in place by the Public Health Officer in March. April saw our lowest totals with monthly numbers increasing as the province eased restrictions.

- In April there were 1.7M boardings, increasing to 2.2M in May and 3.3M in June
- Compared to Q2 2019, ridership was 75% lower during the three months of Q2 2020
- In total for Q2, Expo and Millennium SkyTrain had 7.2M boarding. As a point of reference, in June 2019 alone we recorded 9.2M boarding

Customer experience

- Escalator availability was above target for Q2, with an availability of 93.8% versus a target of 93.0%. Escalator availability has been above target for 2020. Elevator availability for Q2 was 96.5%, which is below the target of 98.1%. Elevator availability KPI was affected to extended outages of devices at Nanaimo, Main, Brentwood, and Sapperton stations.
- Total customer complaints in Q2 was 287. Although this is significantly lower when compared to the same period last year, the complaint rate per 1 million boarded passengers is above target due to lower ridership. This quarter there was an increase in complaints related to elevated track noise, particularly around New Westminster station area. Elevated noise in this part of our system was the result of delayed grinding maintenance due to a mechanical failure of BCRTC’s grinder and COVID-19 travel restrictions affecting our US-based grinding contractor.
- To improve customer communications, BCRTC will be piloting a new wireless microphone that allows station attendants to make platform and station announcements from anywhere in the station. Simulator testing is planned for Q3 in advance of Q4 station pilot.

- A new SkyTrain Attendant uniform kit was approved in Q2 after consultation with front line staff, supervisors and management representatives. The uniform will sport the 'T' branded logo for a unified look across all operating companies. The new uniforms will be on the system in late Q3/early Q4.
- STAs continue to perform daily checks to with our Train Operations department to ensure public address systems are working as designed.

Implementation of McNeil recommendations

An important part of the McNeil Report was the recommendation to improve customer communications during delays. This recommendation includes upgrades to digital displays (platforms, entrances, general), public address (PA) systems and closed-circuit TV (CCTV) which were aging and had not been upgraded since the beginning of SkyTrain. All these measures provide a better daily customer experience while also being a valuable communications tool during delays.

- In Q2, the following stations had digital display upgrade work performed: Braid, Sapperton, Broadway, 22nd Street, and Commercial.
- CCTV upgrades were performed at: Renfrew, Braid, Lougheed, Patterson, 22nd Street, 29th Avenue, New Westminster, Waterfront, and Broadway.
- The PIDS/CCTV/PA project is 73% complete through Q2.

COVID-19 Safety Measures implemented in Q1

BCRTC has implemented several measures to help slow the spread of the COVID-19 virus in stations and staff work areas since the pandemic started. These measures continue to follow the advice of the provincial health authority to clean and sanitize high touch area and promote physical distancing. Additional measures added to Q1/Q2 COVID-19 cleaning and safety protocols include:

Customer facing:

- Coordinated with TransLink to develop Safe Operating Action Plan (SOAP).
- Hand sanitizing stations at SkyTrain's busiest stations including Waterfront, Granville, Commercial-Broadway, Columbia, Surrey Central, Brentwood Town Centre, Lougheed Town Centre, and Coquitlam Central Station.
- Increased management of crowds with signage, floor decals, a fare gate access to ensure six feet physical distancing recommendations.
- Deployment of pit crews at terminus stations to clean and disinfect trains.

Employee facing:

- Provided front line employees with reusable masks and face shields for emergency response.
- Updated documentation and trained staff on new procedures to limit exposure while maintaining quality of service.
- Installed signage and introduced new protocols for all worksites including OMC offices and meeting rooms.
- Continued to allow administration staff to work from home based on business requirements

Key Performance Indicators – as of June 30, 2020	SkyTrain (excluding Canada Line)			West Coast Express		
	Jun YTD Target	Jun YTD Actual	Jun YTD Last Year	Jun YTD Target	Jun YTD Actual	Jun YTD Last Year
Customer Experience				Customer Experience		
Customer Service Performance Survey – SkyTrain Service Overall ¹	8.3	8.4	8.2	8.6	8.9	9.4
Boarded Passengers (in thousands) ²	58,977	31,240	56,288	1,332	594	1,320
Customer Complaints (per million boarded passengers) ³	14.8	21.8	15.2	95.0	331.9	98.5
Safety				Safety		
Major Passenger Injuries (per million boarded passengers) ⁴	1.00	0.93	1.12	0.4	0	0.76
Employee Lost Time Frequency (per 200,000 hours worked) ⁵	5.2	3.76	6.8	0	0	0
Physical Assaults (per 200,000 hours worked) ⁶	2.0	2.0	2.8	0	0	0
Total Recordable Incident Frequency		25.4	36.4			
WSBC Inspections / Orders ⁷		1/0	0/0			
Operations				Operations		
On-Time Performance ⁸	96.5%	94.4%	95.8%	97.8%	90.6%	95.2%
Percentage of Scheduled Service Delivered ⁸	99.7%	98.6%	99.0%	99.9%	97.6%	99.6%
Incidents with duration 16 – 30 Minutes ⁸	32	40	29	-	-	-
Incidents with duration over 30 Minutes ⁸	14	23	18	-	-	-
Finance				Finance		
Operating Cost per Vehicle km ⁹	\$ 3.93	\$3.77	\$3.42	\$14.87	\$20.96	\$13.53
Operating Cost per Capacity km ⁹	\$0.043	\$0.044	\$0.040	\$0.101	\$0.142	\$0.092
<p>1 The TransLink Customer Service Performance survey is completed quarterly for Expo/Millennium Lines and bi-annually for West Coast Express. The 8.6 overall score for BCRTC for the Q2 survey was the highest since 2011. Scores for 8 of the 10 attributes improved over the Q1 survey, and the scores for the other two remained flat. The most notable improvement was for the 'Not being overcrowded' attribute: it was improved by 1.0, from 7.0 to 8.0, which is probably due to the drop in ridership caused by COVID. YTD BCRTC overall score is 8.4. No survey done for WCE in Q2, WCE YTD score is the same as Q1 results.</p> <p>2 The COVID-19 pandemic has resulted in a substantial decrease to our ridership. EM YTD ridership has dropped 44.5% compared to the first half of 2019. The drop was more noticeable for Q2, where ridership decreased by 75% compared to Q2 2019. At the end of June, ridership was at approximately 37% of pre-COVID levels.</p> <p>WCE ridership was even more severely impacted by COVID than EM's with YTD boardings down 55% compared to the same period in 2019; boardings for Q2 alone were down 91.7% compared to Q2 2019. Ridership for WCE was at 13.7% of pre-COVID levels at the end of June.</p> <p>3 The number of complaints received for EM was down 20.5% compared to last year (682 vs. 858). However, the significant drop in ridership caused by the pandemic resulted in higher complaints per million boarded passengers of 43.2%. However, track noise was the one category for which we did receive a higher number of complaints in Q2 2020 compared to last year(164 vs 74) – this is likely attributable to more people being home as a result of the pandemic.</p> <p>Compared to 2019, WCE received 66 more complaints (50.8%) in the first half of 2020, mainly concerning the perceived difficulty of social distancing on WCE trains (EM's social distancing-related complaints were allocated to TransLink). This increase, combined with the decrease in ridership, resulted in a 235.3% increase in complaints per million boarded passengers compared to the prior year.</p> <p>4 EM passenger injuries per million boarded passengers was down 17.1% compared to the first half of 2020. There were only 4 reported injuries in Q2, the lowest quarterly result since 2011.</p> <p>5 There were 7 LTI claims accepted in Q2, bring the YTD total to 17, compared with 29 in 2019. This is the lowest number of claims accepted in the first half of a year since 2016 (12). The claims in Q2 2020 are comprised of: 2 falls, 2 struck by incidents, 2 repetitive strain injuries and 1 caught-in incident. The 2020 injury rate continues to show improvement over past years, decreasing by 44.7% to 2019, and is lower than the 2017 & 2018 mid-year rates. Specific initiatives supporting this improvement are discussed in this report.</p>						

There were no Lost Time Incident claims for WCE in 2020 and have been none since 2017.

6 There were 4 physical assaults on staff in Q2 2020, bringing the YTD total to 9. The YTD assaults per 200,000 hours worked, rate of 2.0 is 28.3% lower than 2019's 2.8, but considerably higher than 2018 YTD (0.75). Specific initiatives supporting this improvement are discussed in this report.

7 A WorkSafeBC occupational safety or hygiene officer may visit worksite to conduct an inspection. An inspection report details findings of a worksite visit by a WorkSafeBC officer. It documents any points of discussion and recommendations. The inspection report may include a compliance order. The order covers any violations found of the Workers Compensation Act or Occupational Health and Safety Regulation and provides a deadline by which the employer must comply. As of the end of Q2, BCRTC has had one WorkSafe BC inspection in 2020, and there were no compliance orders from the inspection.

8 EM's OTP in the first half of 2020 was 94.4%. below 2019's 95.8%. Service delivery at the end of Q2 was 98.6%, 0.4% below last year's comparative result. Both KPIs improved over Q1 when they were negatively impacted mostly by the January snowfall and both KPIs finished above target for Q2. April's OTP (98.36%) was the highest since 2014.

The number of incidents with long duration dropped in Q2 compared to Q1. The duration is from when incident began until the system is fully recovered, alternative services might be provided before the system recovered. There were 12 with a duration between 16 and 30 minutes in Q2 2020, compared to 28 in Q1. As for those with a duration of over 30 minutes, there were 6 in Q2, compared to 17 in Q1. The Q2 results were stable compared to Q2 2019 (+1 for 16-30 incidents, same amount of 30+). Six of the Q2 2020 incidents were related to door issues.

WCE OTP at the end of Q2 2020 was the lowest result over the past three years. April OTP was severely impacted by the annual CP Rail Maintenance program (79.1%). May was also partially impacted (95.2%), but June OTP was above target at to 99.1%. As for service delivery, results improved in Q2 (99.4%). The perfect (100.0%) results in May and June however had less impact than usual on the 2020 YTD results (97.6%), due to the service reductions caused by the pandemic.

9 Operating cost includes Allocated Costs; excludes 3rd Party Revenues and Depreciation.

For the six months ended June 30, 2020, EM operating cost was 7.3% favourable to budget due to lower labour costs driven by hiring delays and reduced benefits usage, lower hydro costs due to reduced service and lower price, non-essential costs reductions and timing of certain maintenance activities and professional services. As for EM operating cost per vehicle kilometre, it was favourable to budget by 4.1%. This was due to operating costs being 7.3% lower than budget, and vehicle kilometres being 3.3% below plan, due to COVID service reductions. EM Operating cost per capacity kilometre was higher by 3.3% compared to budget. This was due to COVID related service reductions, and also due to lower capacity kms (-10.3%) related to higher usage of MK I trains than planned.

For the six months ended June 30, 2020, West Coast Express operating cost was 11.2% favourable to budget largely due to higher contractual transit service costs, lower maintenance expenses, fuel savings due to reduced service and lower labour costs due to vacancies offset by costs related to the Bombardier crewing facility. WCE operating cost per vehicle km and per capacity km both increased by 40.9% compared to budget, and 55% compared to last year. This was primarily caused by COVID related service reductions: both service and capacity kilometres were 37.0% below budget.

TransLink Strategic Priority: CUSTOMER EXPERIENCE AND PUBLIC SUPPORT

CUSTOMER EXPERIENCE

Front/Rear Door-Boarding and Fare Collection

- Following the resumption of front-door boarding and fare collection on June 1, farebox revenue returned to 35% of pre-COVID levels in June and climbed to 40% in July.

Mandatory Face Mask Policy on Transit

- TransLink introduced a mandatory mask policy for customers on August 24. The face mask requirement includes employees when on a vehicle/vessel and not behind a barrier/door.

Customer Information Call Centre

- Call Centre hours of operation were temporarily reduced due to the impact of COVID-19 on ridership and the number of daily calls received. Since reverting to standard operating hours in May, the number of calls has increased each month. In August, there were 24% more customers calling to speak with an agent every day compared to May. Contributing factors/events to increased call volume in May:
 - Re-launch of the spring service changes on May 18
 - Major service disruptions affecting the Expo Line and Canada Line on May 23
 - Service disruptions on the Expo Line and Millennium Line on May 26
 - Questions and comments about a variety of COVID-19-related issuesAugust call volumes equate to 62% of pre-pandemic levels.

Transit Security Presence and Visibility

- Transit Security Officers continue to provide a high-visibility security presence throughout the transit system at loops and exchanges, SeaBus terminals, bus stops, rectifiers, CMBC facilities, as well as HandyDART. They will continue to provide a vital link for our employees and customers in the system, especially to assist with any further policy changes as part of the COVID-19 response.

Guide and Service Dog Training

- On July 22 at Vancouver Transit Centre, CMBC staff helped to familiarize 27 guide-dogs-in-training on our buses. The puppies traveled from all over the Lower Mainland and were represented by the BC & Alberta Guide Dogs group. This half-day session helped to accelerate training that had slowed down as a result of the COVID-19 pandemic.

Wheelchair-accessible Bus Stops

- As of the end of June 2020, CMBC reached 79.7% for bus stop wheelchair accessibility with 6,668 accessible stops across the system.

Access Transit Service Delivery (ATSD) Update

- *Ridership* – At the start of the COVID-19 pandemic, HandyDART ridership fell by 85% resulting in less than 700 trips on some weekdays. As of August 18, they are delivering approximately 30% of their pre-COVID service level, however they are using about 70% of budgeted service hours to promote physical distancing. The majority of trips continue to be related to renal treatments. Approximately 90% of trips include two or fewer passengers.
- *Recovery Planning* — Access Transit Service Delivery (ATSD) is in regular contact with local health authorities and approximately 140 adult program facilities regarding plans for reopening. Historically, the adult programs account for about 34% of HandyDART demand. The programs are not anticipating returning to full classes in the near future. As of August 18, HandyDART was supporting about 12 programs with significantly reduced client levels.
- *Customer Calls* – In the first stages of the pandemic, the Access Transit Customer Care (ATCC) team reached out to more than 2,000 customers between the ages of 65 and 102 to see how they were doing and discuss safety measures on the transit system. As the Province moved into recovery, calls shifted to have a greater emphasis on understanding upcoming customer travel patterns and identifying safety concerns.
- *Trapeze Hosting and Upgrade* — The hosting of the HandyDART service platform, Trapeze, is transitioning to First Transit. Following the transition and an associated upgrade, a new module that will enable customers to book their trips online is expected to be rolled out.

SAFETY

Responding to the COVID-19 Pandemic: Our Employees

- *Hotline* — The employee hotline that was in place since March 18 was discontinued in August due to lower demand. Employees are now directed to contact Occupational Health.
- *Safety Plans* — Corporate Safety developed 52 departmental/group COVID-19 safety plans that rolled into 12 COVID-19 facility safety plans. The facility safety plans outline safety controls and measures for cleaning and physical distancing at CMBC worksites. They are posted at all worksites and also accessible to employees via the company intranet. In addition, a COVID-19 e-training module was developed for employees returning to the worksite after working remotely.
- *Temperature Monitoring* — Voluntary temperature monitoring was implemented prior to the start of shift for Transit Security and TComm staff. This practice is continuing.
- *Face Masks* — In May, frontline staff were provided with a minimum of two non-medical, reusable face masks. One additional “T”-branded mask was provided in early September.
- *WorkSafeBC Claims* — CMBC recorded 7 registered claims related to COVID-19 (June YTD).

Employee Workplace Injuries / Accepted Lost Time Claims

- During the first half of 2020, CMBC recorded 191 accepted lost time claims at a rate of 8.7 claims per 200,000 hours worked, which is higher than the 166 claims and rate of 7.7 achieved during the same period last year. Motor Vehicle Incidents were the leading cause of incidents (24% of all lost time claims), followed by Falls on the Same Level (18%), Acts of Violence (14%), and Overexertion (13%). Regardless of the cause of injury, approximately 22% of claims in 2020 (June YTD) had a mental health component. To keep safety top of mind and mitigate these injuries, CMBC continues to improve incident investigation processes – the goal is always to eliminate the cause of injury – and share prevention messages. Unfortunately, “Safety Days” were postponed due to COVID-19 protocols. As a result, electronic communications have increased via the company intranet and TV screens at facilities.

Hand Sanitizer Pilot

- In response to an increased focus on cleanliness and safety during the COVID-19 pandemic, hand sanitizer units for customers' use were installed on 10 RapidBuses as part of a pilot in August. Three units were mounted at specific locations onboard each vehicle. The pilot is ongoing with minor modifications.
- Interestingly, the installation of hand sanitizer units onboard buses was suggested by two separate employees during the Bright Ideas campaign in 2019. Both employees received recognition for their ideas before implementation of the pilot.

Cleaning and Disinfection of Fleet and Facilities

- Maintenance Engineering is currently researching disinfection technologies being piloted by other transit agencies in North America to determine if any are suitable for adoption by CMBC. Some of the options being investigated include adjusting HVAC settings on buses to maximize fresh air intake, changes to filter replacement procedures, and the use of alternative types of disinfection products.
- Beginning on May 25, Bus Services increased its fleet disinfection schedule to twice weekly. The enhanced cleaning initiatives for vehicles, vessels, and CMBC facilities implemented at the start of the pandemic are ongoing.

Emergency Management

- The CMBC Pandemic Plan is being updated to reflect all actions taken during the first wave of COVID-19. All virtual Emergency Communications Centre technologies are undergoing a "health check" to ensure readiness for future COVID-19 waves.
- Departmental business continuity planning is ongoing to ensure CMBC is poised to manage the potential future impact of COVID-19, as well as any other disaster.

Transit Operator Assault Statistics

- CMBC recorded 37 Transit Operator assaults during the first half of 2020 — a rate of 0.48 assaults per 1M boardings. This is lower in terms of number of incidents compared to results for the same period last year with 48 assaults. This year's YTD rate of 0.48, however, is higher compared to last year's rate of 0.35. This indicates that assaults have not decreased proportionately with customer levels. Geographically, 68% of assaults took place in Vancouver, followed by Surrey with 14%. CMBC continues to focus on mitigating acts of violence against Transit Operators. In addition to the Operator Protection Barriers, the Violence in the Workplace (VIW) committee, Transit Security, and Transit Police all continue to focus on measures to protect our frontline employees.

Transit Operator Protection Barriers

- Due to the COVID-19 pandemic, 1,646 additional temporary Operator Protection Barriers were installed on the entire bus fleet in just 30 days. 728 vinyl barriers were installed on vehicles that were not yet equipped with permanent barriers while 918 had existing permanent barriers and were supplemented with plexiglass shield extensions.

ENVIRONMENTAL STEWARDSHIP

Low Carbon Fleet Strategy (LCFS)

- The LCFS team continues to move the project forward, with more details expected to be provided in the next few months.

Battery-electric Bus Pilot

- Battery-electric buses continue to provide regular service all day on Route 100 (22nd Street/Marpole Loop).
- Most of the communication and connectivity issues between the vehicles and chargers noted in the spring have been resolved.
- A CUTRIC data evaluation gap analysis report was finalized in August and it is helping to determine the performance and interoperability of the buses and chargers.

Spills KPI Target

- As of July 2020, the YTD spills KPI is 1.86% pills per million kilometres which is below the 2020 spill rate target of 2.9%.

TransLink Strategic Priority: ENSURE STATE OF GOOD REPAIR

OUR PEOPLE

Maintenance Apprentice Program

- After being suspended due to the COVID-19 pandemic, the Maintenance Apprentice Program resumed in August. In anticipation of the BC Restart Plan in June, Maintenance Training worked with representatives from Safety, Maintenance Engineering, and Unifor local 2200 to develop, and then refine, a restart plan to ensure the safety of apprentices.

Community Shuttle New Bus Operator Training

- In February 2020, a revised training syllabus was implemented for the Community Shuttle New Operator Training Program, adding one day to the program. Due to the COVID-19 pandemic, delivery of this program was suspended, but has since resumed.

Video-based Route Training

- Video-based route training was given to Transit Operators prior to seasonal service changes. In the summer, video training was also delivered to support the move of Route 388 (22nd Street/Carvolth Exchange) from Surrey Transit Centre to Hamilton Transit Centre for September 2020.

Resource Planning: Operations & Contracted Services

- As a result of the COVID-19 pandemic and to ensure physical distancing, in the spring CMBC suspended five new Transit Operator classes, leaving a shortfall of Operators required for June 2020. With the return of New Operator Training, the September 2020 sheet was adequately staffed.
- Last year, a Training Task Force developed a new syllabus for Conventional Operator Training aimed at increasing the graduation rate. The new syllabus took effect in November 2019 and CMBC continues to see an increased graduation rate since launch (2020 YTD graduation rate is

83% vs. 2019 final rate of 70%). Changes included increasing driving time prior to critical testing as well as total driving time.

OUR ASSETS

Bus Fleet and Facility Capacity

- Work continues to move forward to ensure CMBC is poised to meet future demands for bus fleet and facility capacity:
 - Detailed design work for the future Marpole Transit Centre and preparation to support the Low Carbon Fleet Strategy.
 - Assessment of Burnaby Transit Centre and Vancouver Transit Centre expansion projects.
 - Development of additional strategies to increase bus storage and maintenance space at existing depots.

Onboard Technology Assets Program (OTAP)

- The OTAP pilot includes four main projects: replacing radio systems for improved connection and better coverage; replacing onboard computers and touchscreens with a larger screen and better visuals; adding new routers to improve data communication with Transit Communication; and installing new hardware to improve camera feeds to Security.
- The pilot ended on August 31. At that time, there were 94 buses using OTAP equipment across all depots. The full fleet roll-out is expected to start in October 2020 and complete in Q4 2022.
- Regarding piloting collision avoidance technology, three vendors have been selected. Two have already set up their system on three buses each. A third vendor is expected to join the pilot with another three buses. Demo testing for the first two vendors will run until October 2020. Operator feedback is being collected throughout the trial.

Financial Results

- CMBC's Q2 2020 operating costs were \$359.1M with \$20.5M (5.7%) favourable to budget. The favourability was primarily driven by lower fuel costs (lower fuel prices and lower service kms).

TransLink Strategic Priority: MOBILIZE THE MAYORS' VISION

FLEET

Fleet Procurement (2019 and earlier)

Buses	Expansion	Replacement	Total	Notes
Double-decker	5	27	32	32 of 32 buses delivered
Community Shuttle (2019)	5	49	54	54 of 54 buses delivered

- The last of the 32 double-decker buses went into revenue service at Richmond Transit Centre on August 31.
- All 54 low-floor Community Shuttles have been in revenue service since June 2020.

Fleet Procurement (2020-2022)

- Due to changes in TransLink enterprise priorities, the procurement timelines for bus fleet expansion were deferred, taking future priorities and 2021 budget considerations into account.

Double-decker Buses

- CMBC has been operating double-decker buses out of Richmond Transit Centre on the following three routes:
 - 301 – Newton Exchange/Brighthouse
 - 620 – Tsawwassen Ferry/Bridgeport Station
 - 555 – Carvolth Exchange/Lougheed Station

Farebox Replacement for Conventional Buses

- As of August 10, all conventional buses in the CMBC fleet transitioned to new paper fare media. The new media does not include a specific date, rather a colour/symbol, so all unused booklets are collected by the Farebox Revenue team at the end of each day and stored for reuse.
- The next phase of the Farebox Replacement Project is the replacement of the Cubic electronic fareboxes with TAG mechanical fareboxes. West Vancouver Blue Bus has fully transitioned to the new fare media and fareboxes. The first installations of the new fareboxes at CMBC were completed in July and it is expected that all 1,500 conventional buses will be transitioned by the end of 2021.
- Transit Operators have been trained on the new fareboxes and fare media.

New SeaBus Vessel Update

- Planned modifications to the *Burrard Chinook* were delayed due to Singapore's COVID-19 restrictions. Singapore began their gradual reopening over the summer and work resumed on the vessel on August 11.

KEY PERFORMANCE INDICATORS AS OF JUNE 30, 2020

KEY PERFORMANCE INDICATORS ¹	2020 ANNUAL TARGET	2020 YTD TARGET	2020 YTD ACTUAL	2019 YTD LAST YEAR
TransLink Customer Survey – Bus service overall ²	8.0	8.0	8.1	7.9
Scheduled Service Delivered ³	98.5%	98.5%	91.6%	97.8%
Customer complaints per million boarded passengers	100	92	101	99
Customer commendations per million boarded passengers	16	16	15	16
HandyDART denial as a % of trips requested as defined in agreement	0.12%	0.12%	0.07%	0.04%
On-time Performance				
Bus Regularity – frequent service	79.0%	79.0%	83.3%	78.8%
Bus Punctuality – infrequent service	79.0%	79.0%	85.1%	81.4%
Spills per million Kms	2.9	2.9	1.7	2.6
Preventable collisions per million Km ⁴	10.8	10.8	7.7	10.8
Operator assaults (CUTA 1-4) per million boarded passengers ⁵	0.29	0.29	0.48	0.35
Employee lost time accepted claims per 200,000 hours worked ⁶	8.0	8.0	8.7	7.7
Pedestrian incidents with verified bus contact per million service hours ⁷	-	-	7.8	17.4
Onboard injury claims per million boarded passengers	3.9	3.9	4.2	4.0
CMBC operating cost per service hour ⁸	\$121.84	\$121.15	\$123.21	\$120.83
Access Transit operating cost per trip	\$41.52	\$41.13	\$66.56	\$41.03
METRICS				
Access Transit trips provided (thousands)				
HandyDART	1,259	633	328	593
Supplemental taxi service	152	76	37	83
Total Trips ⁹	1,411	709	365	676

¹ Performance measures are for CMBC business operations (Conventional Bus, Community Shuttle, and SeaBus) and exclude contracted conventional transit and contracted Community Shuttle.

² The TransLink Customer Satisfaction Survey is conducted every quarter. The 2020 YTD Actual represents the average results for Q1 (7.9) and Q2 (8.3).

³ The actual service delivered is lower than last year and budget due to snow in January and the COVID-19 pandemic.

⁴ This data is subject to change due to the timing of adjudications.

⁵ CMBC recorded 37 Operator assaults during the first half of 2020. This is lower in terms of number of incidents compared to the same period last year (48). However, this year's YTD rate of 0.48 is higher compared to last year's rate (0.35).

⁶ In the first six months of 2020, CMBC recorded 191 accepted lost time claims at a rate of 8.7 claims per 200,000 hours worked which is higher than the 2019 rate (7.7).

⁷ The target for this metric is unavailable as it specifically refers to pedestrian incidents with verified bus contact as opposed to all types of pedestrian incidents. A target at the corporate level is available only for the overall pedestrian incident rate (2020: 16.2 incidents per million service hours).

⁸ Net of recoveries and excludes TransLink allocated costs.

⁹ Total Access Transit trips provided in the first six months of 2020 were lower compared to the same period in 2019 and when compared to budget. Trips were reduced in January due to multiple days of running Essential Services because of winter conditions and since March due to the COVID-19 pandemic.



METRO VANCOUVER TRANSIT POLICE REPORT FOR SEPTEMBER 2020 TRANSLINK BOARD MEETING

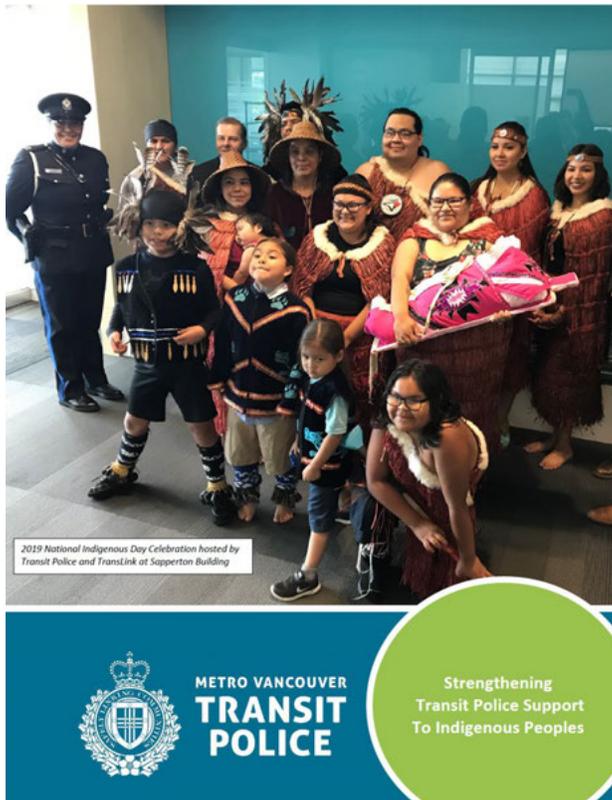
TransLink Strategic Priority: Customer First

- **Strengthening Indigenous Relationships**

In June 2020, Transit Police was proud to welcome Constable Kirk Rattray into the newly created role of Indigenous Liaison Officer (“ILO”). Cst. Rattray assumed this pivotal role after serving four years as the Transit Police Neighbourhood Police Officer for East Vancouver and the North Shore, and over a year in patrol prior to that. He has a long history of drawing on his Tahltan First Nation heritage to build trust and partnerships between Indigenous communities and police. Prior to joining Transit Police in 2014, Cst. Rattray served with the Stl’at’imx Tribal Police Service for nearly four years, and the Winnipeg Police Service for 16 years. While serving with Transit Police, Cst. Rattray has worked closely with such groups as the Vancouver Aboriginal Community Policing Centre, Aboriginal Transformative Justice Services Society, Indigenous Perspectives Society, Native Education College and the Vancouver Police’s Diversity, Inclusion, and Indigenous Relations Section. He has taken part in multiple Pulling Together Canoe Journeys, educated police recruits on Indigenous issues at the Justice Institute of BC, and provided cultural awareness training within Transit Police.



Creating the ILO position has been a priority for Transit Police for a number of years. Transit Police is indebted to the Indigenous groups who offered their wisdom, and to reports such as the Missing and Murdered Indigenous Women and Girls Final Report and the Truth and Reconciliation Commission Report, which have been invaluable sources of guidance for the police service and how to bring collaboration and understanding within the Transit Police toward better serving the Indigenous community. In January 2020, the Transit Police Board received a report on the Transit Police work and initiatives in relation to strengthening



outreach and support to Indigenous people. Included in the report was an action plan endorsed by the Police Board and implementation has now commenced. The ILO position and subject matter expertise support to operations are two examples of actions already launched. [The [Report](#) is available on the Transit Police website.]

As soon as is practicable given the pandemic situation, Transit Police plans to advance its work to launch the Blue Eagle Community Youth Cadet project (external funding secured), which is being developed by Transit Police in partnership with the Vancouver Aboriginal Community Policing Center and Vancouver Police. This program will serve to empower Indigenous youth, aged 13-15, by offering mentorship, building leadership skills, and supporting them as they discover their potential.

- **Launched New Anti-Sex Offence Campaign**

Background - In 2012, Transit Police designated sexual offending on transit as one of its top four priorities. Since then, Transit Police has run multiple campaigns to educate the public and put offenders on notice that sexual offending on transit will not be tolerated. One of the critical components of each campaign is highlighting the Transit Police text reporting service and encouraging witnesses and victims to discreetly text Transit Police, in real-time, at 87-77-77 when an incident occurs.

In 2019, Transit Police had 212 reports of sexual offences on transit, a 19% decrease from 2018. All reports of sexual offences are taken seriously by Transit Police and investigated thoroughly. Victim services are also made available for both victims and witnesses. Previous research conducted by Transit Police Cst. Biggs has demonstrated that the summer months are a peak period for sexual offending on transit. Examples follows:

Sexual Assault – On August 5, 2020, a female set down beside a male at a Richmond bus stop, pending arrival of the bus. The male then placed his hand on the female’s inner thigh. The bus arrived and the female passenger boarded the bus. The male passenger then entered and sat beside the female passenger and fondled her breasts. The female pushed the male’s hand away and told him they were not friends. The female passenger disembarked the bus and reported the incident to the Richmond RCMP. The RCMP then advised the Transit Police. The female had taken a photo of the suspect, which was provided to Transit Police. Transit Police Officers commenced an investigation and, on August 11th, went to original bus stop where they were able to identify and arrest the suspect.

Indecent Act – On July 21, 2020, a male entered Vancouver City Centre Station. He waited until a female passenger passed him and then boarded the same Canada Line train to Waterfront. He sat in a seat across the aisle from the woman, even though the train was otherwise empty. During travel, the woman observed the male removing his penis from his pants and masturbate while staring at her. The woman began to collect her things but the male disembarked at the next station. The woman reported the incident to Transit Police and during their investigation, a ‘Suspect for ID’ Bulletin was issued. The suspect was subsequently identified by other police officers, as the suspect had recently committed other similar acts while wearing the same t-shirt. On August 16, 2020, Transit Police arrested the suspect (at his residence) for an Indecent Act. At the same time, he was apprehended under the *Mental Health Act* and, as a result, transferred to a hospital physician’s care and released from police custody on an undertaking.

New Campaign – Transit Police entered an exciting partnership with grade 12 students from Sir Winston Churchill Secondary School for its next anti-sex offence campaign. The objective is to bring awareness around sexual offending on public transit and to encourage victims and witnesses to report such incidents. The students reached out to the Transit Police and TransLink in June 2019 to discuss past anti-sex offence messaging and to explore the potential of a refreshed campaign. They sought messaging to educate youth on what to do when they witness or experience a sexual offence on public transit. Transit Police and TransLink quickly jumped on the opportunity to collaborate with the student-led initiative for the 2020 campaign (phase 4).

Over the past year, the students worked diligently on developing the campaign scope and creating the artwork for the advertisements that depict realistic situations of unwanted touching and the critical role that witnesses play in reporting sexual offences. They showcased clear leadership, initiative and creativity in seeing this campaign through to completion. Also included in the partnership, was an education presentation delivered by Transit Police to students at Sir Winston Churchill Secondary on preventing sexual offences on transit and how to report them if a witness or victim.

On August 4th, the media campaign was officially launched with a press conference involving a number of the students and Transit Police Media Relations Officer - Cst. Yake. The campaign will run over the next few months and consist of: 150 advertisements on buses, 110 advertisements on SkyTrain and some large format ads at select stations, and digital advertising on Facebook, Instagram and Twitter.



**Be mindful of your surroundings.
Report acts of sexual assault.**

If you witness or experience any type
of sexual assault, text Transit Police
at **87-77-77**.
Dial 911 in an emergency.

Illustration by Marianne Luth,
Sir Winston Churchill Secondary School





- Responding to Medical Emergencies and Opioid Crisis**

Health officials have recently noted that the situation of COVID-19 has contributed to a significant increase in overdose deaths in May, June and July 2020. For example, in July 2020, there were 175 suspected illicit drug toxicity deaths, a 136% increase over the 74 deaths during



Cst. Mike Yake
@CstMYake

Last night @TransitPolice officers saved two lives by administering life-saving Naloxone. Thanks to our partners @BC_EHS, both were transported to hospital to get the help they need. #MoreThanFareEnforcement



8:00 AM - Aug 19, 2020 - Twitter Web App

the same month in 2019. Transit Police Officers carry Naloxone kits and are educated/trained on the opioid crisis and how to administer Naloxone if an overdose is suspected. As of August 25, 2020, there were 18 events in which Transit Police Officers administered Naloxone to transit riders or members of the public to save lives. The month of August had the highest ever number (6) of overdose events responded to by Transit Police. Events take place at SkyTrain platforms, around stations and on the bus. The number of drug overdose events attended to by Transit Police in 2020 is tracking higher than in the past three years, for which there were 20 events annually.

- Transit Police 2019 Report to the Community**

The Transit Police recently released its 2019 Report to the community, with a video and companion statistical document. The companion document is attached and the video link is provided at the end of the document (and on www.transitpolice.bc.ca).

TransLink Strategic Priority: State of Good Repair

- Performance Measurement Culture**

Transit Police is an intelligence-led and data-driven police agency, and gathers comprehensive statistics in relation to crime and organizational performance. Transit Police shares statistical

and performance information with the public, TransLink and stakeholders through a variety of tools. A snapshot of key statistics for 2020 Q1/Q2 as compared to 2019 Q1/Q2, follows:

Transit Crime and Safety Statistics	2019 Q1 /Q2	2020 Q1 /Q2	% Change
Crimes Against Persons/100,000 Boarded Passengers <i>(primary and assists)</i>	.365	.547	50%
Crimes Against Property/100,000 Boarded Passengers <i>(primary and assists)</i>	.422	.612	45%
Other Criminal Code Violations/100,000 Boarded Passengers¹ <i>(primary and assists)</i>	.258	.800	210%
Provincial Violation Tickets (“VT”)	8264	3922	-53%
Arrests - Warrants Executed (All)	490	311	-37%
Arrests - New Charges²	367	323	-12%
Total S. 28 Mental Health Act Apprehension Files	99	73	-26%
Sexual Offences <i>(primary and assists)</i>	109	54	-50.5%
SCBCTA Fare Bylaw Infractions	8180	4642	-43%

As a result of COVID-19, for the 2020 Q1/Q2 period, the number of transit Boarded Passengers dropped by 44.7% and there was a decrease in Transit Police total files by 35% (largely fewer Violation Ticket files). However, notwithstanding the impact of the pandemic on regular ridership, criminals continued to use the transit system and target transit riders. This is demonstrated in the 2020 Q1/Q2 increased rates for both Crimes Against Persons per 100,000 Boarded Passengers (up 50%) and Crimes Against Property per 100,000 Boarded Passengers (up 45%).

The actual number of Crimes Against Persons in 2020 Q1/Q2 was 673, as compared to 814 for the same period in 2019; this is a 17% decrease. The actual number of Crimes Against Property in 2020 Q1/Q2 was 753, as compared to 940 for the same period in 2019; this is a 20% decrease.

Robbery – The evening of July 31, 2020, a female passenger was seated on a bus in downtown Vancouver. Four youths boarded the bus and seated themselves around her at the front of the bus. The youths began consuming alcohol, which the female passenger reminded them was illegal. This began an argument, which culminated in the female passenger (“victim”) being assaulted, receiving numerous blows to her face, back of her head and arms. One of the youth took the victim’s bag and disembarked with the other youths, who then fled on Seymour Street. The victim then noted her backpack was gone; the bus operator contacted Transit Police, who

¹ Other Criminal Code Violations: Includes such offences as weapons, disturbing the peace, child pornography, obstruct peace officer, possess break and enter instruments, intimidation and threats, breach/bail violations, indecent acts/exposing, and counterfeiting.

² Arrest means an actual arrest and all other cases where charges were recommended to Crown Counsel.

attended the scene (along with EHS). Transit Police obtained statements from the victim and witnesses. A male had seen the youths flee and he retrieved the victim's backpack; however, her phone, laptop and wallet (with ID and South Korean currency and bank cards) were not located. The youths were intercepted by Transit Police Officers at Broadway-Commercial SkyTrain Station where they were arrested for Robbery and subsequently released on an Undertaking to appropriate guardians or designate.

The number of sexual offence files (primary and assists) for the 2020 Q1/Q2 was significantly lower than 2019 Q1/Q2, down by 50.5%. This may be attributed, in part, to the lower ridership during the pandemic and greater visibility for a person if they commit a sexual offence.

Criminal Warrant Arrests

Reducing crime and disorder on transit and the surrounding community is Strategic Objective #1 of the Transit Police Strategic Plan. In Q1/Q2 2020, Transit Police Officers made 311 arrests for outstanding criminal warrants, which included RCMP, Municipal Police and Transit Police issued warrants from BC and elsewhere. The number of warrant arrests for the 2020 Q1/Q2 is - 37% lower than the same period in 2019. The volume of warrant arrests continues to be significant when compared to historical rates (i.e., 591 criminal warrants in full year of 2015).

Many warrant arrests arise from on-view work of Transit Police Officers in their Community Service Areas (assigned patrol area), calls for service, confirming identity incidental to criminal arrest or during enforcement of a provincial statute offence (such as misuse of a fare gates). However, Transit Police Officers also familiarize themselves with offenders and criminals of concern or offenders wanted through law enforcement intelligence sharing, regional BOLFs (Be on the Look Out For), and the Transit Police Offender Management Program.

Misuse of Fare Gates and Provincial Violation Tickets (“VTs”)

In comparing the 2020 Q1/Q2 to 2019 Q1/Q2 periods, there were decreases in the volume of issued Fare Infraction Notices (“FINs”), a TransLink bylaw, as well as the number of Violation Tickets (“VTs”). The decreases are reflected of the lower ridership and may also be attributed to an adjustment to operational deployment models and policing practices during the pandemic. (Issuance of VTs is associated to Transit Police Officers’ active observations and enforcement of the provincial offences regarding the misuse of fare gates³, which was new legislation in 2017.)

Of critical importance to the safety of transit customers and staff, and the general public, is how the process of confirming an offender’s identity allows Transit Police to learn whether there is a criminal record or conditions of release, and if there are any outstanding warrants to be executed. (See illustration below.) Executing outstanding warrants contributes positively to

³ The amended *Greater Vancouver Transit Conduct and Safety Regulation* came into effect March 2017. A person who commits an offence under the *Regulation* can be issued a violation ticket in the amount of \$173. The new offences are intended to focus on “disorderly behavior”, instead of the loss of fare revenue. Neither the Transit Police Officer nor the offender needs to be inside the **fare paid zone** to issue a ticket to a person who commits an offence under s. 8(4) of the *Regulation*. Because the person has committed an “offence”, the Officer has lawful authority to briefly detain the person outside of the fare paid zone. Persons who do not “tap in/tap out” will contravene section 8(4)(d) – “going through a fare gate that was not opened by that person.” Accordingly, Transit Police can issue a ticket on that basis.

the work of our Jurisdictional Police partners and their offender management and community safety and crime reduction efforts.

Warrant Arrest – *The evening of July 29, 2020, Transit Police Officers were doing foot patrols around Surrey Central SkyTrain Station, when they observed a male push through the fare gates to exit the station and walk into the bus loop. As it is a provincial violation offence, under the Transit Conduct and Safety Regulation, to push through the gates, Transit Police Officers stopped the male to issue a violation ticket. The male verbally identified himself; however, the name provided was false. The male was given an ‘Obstruction Police Officer’ warning, which eventually resulted in the male’s true identity being confirmed. The police database query revealed three outstanding warrants out of Surrey RCMP (assault/theft under, breach of probation and theft). The male was arrested for the warrants by Transit Police and transported to Surrey RCMP cells. He was also issued a Violation Ticket for the fare gate offence.*



Metro Vancouver Transit Police 2019 Report to the Community

Policing the Moving City

Video Companion



METRO VANCOUVER
**TRANSIT
POLICE**

Message from the Police Board Chair

A lot has happened since the period covered in this 2019 Report to the Community. Last year our Police Board, management team and employees were out in the field engaging with community partners and the public. Obviously, the COVID-19 pandemic changed some of the ways we engage with the public. In addition, the more recent conversations surrounding police reform are top of mind for me, my fellow Police Board members and the rest of our agency. Reflecting back on 2019, my hope is that we can gain insights into the best parts of what defines our community policing approach while listening closely to the public as we develop our priorities moving forward.



Delivering a safe and secure transit system is our number one strategic goal. In 2019 Transit Police saw good news, as crimes against persons and property decreased across the system. We increased our Bus System focus, adding the West Coast Express to our bus loop/exchange patrol initiative and implemented a bike bait program. As part of our annual sexual offence awareness campaign, 1100 advertisements were placed on buses, resulting in more reports made directly to Transit Police even as we saw a reduction in total sex offences reported. In addition, officers made over 1000 arrests for outstanding criminal warrants, a 14% increase over 2018. Sadly, our service saw a 17% increase in mental health apprehensions files. Every single file represents an individual in crisis and an intervention by our officers, to de-escalate difficult situations and prevent individuals from coming to harm.

A subject of much discussion for the Police Board in 2019 was how to turn our commitment to Reconciliation from words to actions and that work is reflected in the 2019 report on 'Strengthening Indigenous Relations at Transit Police'. Despite the constraints imposed by COVID-19, I am excited to see the work done in this area in 2019 bearing fruit in 2020.

We saw the end of an era in 2019, when Mark Reder, our Board Chair since 2011, retired from his leadership post. Transit Police is irrefutably in a stronger position today than when Mark joined the Board. His sure hand guided the service through many changes including the development and implementation of the community policing service delivery model, a comprehensive strategic plan, and a host of other achievements too numerous to list here. We are deeply indebted for his years of service, his fine example, and the lasting impact that his work has today. Thank you Mark.

Finally, I want to express how grateful we are for the recovery of Cst. Josh Harms, who was shot while on duty in January 2019. Policing comes with unique risks but despite this, our officers show up every day, rain or shine, dedicated to serving their community. On behalf of the Police Board, I want to thank Cst. Harms and all of our officers at Metro Vancouver Transit Police for their dedication and service to public safety.

Sara Levine - Chair, Transit Police Board

Message from the Chief Officer

2019 began with one of the most high-profile policing incidents at a transit location in TransLink's history. One of our Transit Police Officers, Cst. Josh Harms, was shot in the line of duty, resulting in a five-day manhunt for the suspect by the Surrey RCMP and other jurisdictional police agencies. We are immensely grateful that Cst. Harms has since recovered and returned to duty. We also want to thank both the Surrey RCMP and the Burnaby RCMP for their hard work in identifying, locating and arresting the suspect.

Since joining the Transit Police in 2019, I have reaffirmed to our officers and civilian staff the three goals of policing, listed in their order of priority:

1. To save lives;
2. To preserve the peace;
3. To enforce the law.

Our topmost goal will always be to save lives, to intercede and take action in order to guarantee the health and safety of individuals we encounter on and surrounding transit. This involves responding to texts and calls about those in distress, apprehending and transporting to hospital those people who require the support of trained physicians and, where necessary, making arrests of those who have committed crimes and risk the well-being of others.

In 2019, reported perceptions of safety and security on transit continued to be one of the highest-rated metrics for the TransLink Enterprise, with an overall score of 79.6 percent satisfaction reported by our transit riders. Since joining Transit Police last year, I've spoken to



many people about establishing transit stations as recognized places of safety in the community. If you found yourself lost or stranded far from home, the closest transit exchange/station would provide a nexus of safety and support, with friendly, courteous and highly-trained transit, security and policing staff readily on hand. I am proud of the combined efforts of our employees in serving the 22 different communities that transit crosses each day, and as we strive to further improve feelings of safety, security, comfort and service for the travelling public.

Dave Jones - Chief Officer

Metro Vancouver Transit Police

2019 PERFORMANCE STATISTICS

Arrests

↑14%
Warrant Arrests*
up by 14%



↓6%

Arrests on New Charges¹
down by 6% from 780 (2018)
to 734 (2019)

↑2%

Breaches²
up by 2% from 466 (2018) to 474 (2019)

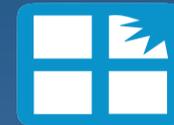
¹ Arrest means an actual arrest and all other cases where charges were recommended to Crown Counsel.
² Breaches including secondary offences; does not include assists.

Offences



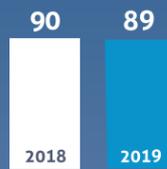
↓21%

Crimes Against Persons³
per 100k boarded passengers
down 21% from .466 (2018)
to .369 (2019)



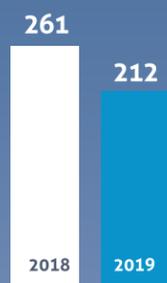
↓24%

Crimes Against Property⁴
per 100k boarded passengers
down 24% from .564 (2018)
to .430 (2018)



↓1%

Workplace Violence Against Bus Operators (Assaults) are down⁵



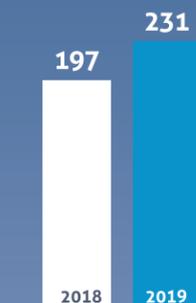
↓19%

Reported Sex Offences are down



↑11%

Joint Initiatives/Operational Plans with Jurisdictional Police Departments
up by 11% from 103 (2018) to 114 (2019)



↑17%

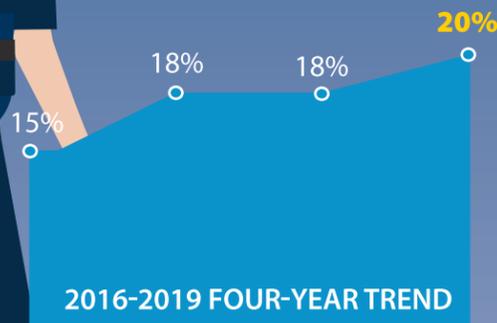
Section 28 Mental Health Act Apprehension Files are up

Visible Diversity



Female Officers

now make up 20%
of our police officers



Number of Languages Spoken:

29



³ Crimes Against Persons: 2019 – 1,670 files/452,537,031 boarded passengers.
⁴ Crimes Against Property: 2019 – 1,946 files/452,537,031 boarded passengers.
⁵ Includes bus operator assaults only; does not include unfounded/unsubstantiated/threats.

Community Engagement

Members of the Transit Police Community Engagement, Senior Management and Explosive Detection Dog Teams attend hundreds of events each year to help promote transit safety, the Transit Police *See Something Say Something* Campaign and the 87-77-77 text reporting service.

Student Outreach



Seasonal Initiatives



Indigenous Relations



228 Community Events Attended



Safety Education



Community Partner Events
@CstDChua, Instagram

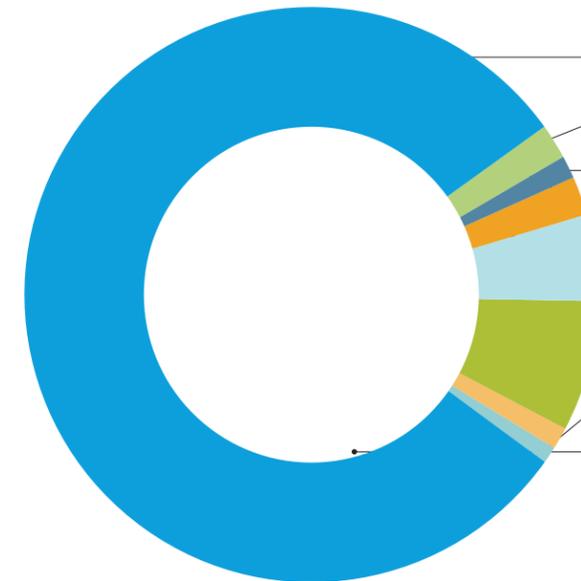


Helping Vulnerable People



Financial Summary

The Transit Police budget for 2019 was \$39,907,472. Total actual expenditures were \$39,538,888. The expenditures include TransLink allocated costs of \$4,561,478 for centralized services (premises rent and information technology services).



2019 Transit Police Budget	%	2019 Actual	2019 Budget
Salaries/Benefits	83	\$32,756,214	\$33,231,718
Uniform/Equipment	2	840,721	492,821
Vehicles	1	524,336	436,002
E Comm/PRIME	2	878,389	918,483
Facilities	5	2,029,091	2,143,619
Administration	7	2,949,394	2,657,240
Training/Education	1	558,805	580,681
Legal & Professional Fees	1	351,289	384,177
Recoveries*	-3	(1,349,350)	(937,022)
Net Expenditures	100%	\$39,538,888	\$39,907,719

*Salaries represent the net costs to Metro Vancouver Transit Police after recoveries (i.e. those officers seconded and paid for by other joint police initiatives).

**Transit Police salaries are consistent with those of independent municipal police agencies in Metro Vancouver.

***In 2019, the authorized strength of Metro Vancouver Transit Police was for 183 officers and 74 civilian employees.



For a complete breakdown of strategic initiatives at Metro Vancouver Transit Police in 2019, see our Strategic Plan Year End Update located at: <https://transitpolice.ca/news/strategic-plan-2016-2020/>



METRO VANCOUVER
**TRANSIT
POLICE**

www.transitpolice.ca

TO: Board of Directors

FROM: Simon Tang, Vice President, Major Projects

DATE: September 4, 2020

SUBJECT: Broadway Subway Project (BSP) Status Update

EXECUTIVE SUMMARY

The BSP Support Agreement (SA) between the Province and TransLink was executed on June 5, 2020. As previously reported to the Board, the Canada Line Concession Agreement Amendment (CAA) No 14 has been executed. This Amendment provided for confirmation of the acceptability of the BSP technical requirements by the Concessionaire for the integrated Broadway-City Hall station. The corresponding commercial terms are addressed in the CAA No 16, which has now been agreed between the Province, Concessionaire and TransLink and executed. The Integration Agreement for the Canada Line Broadway-City Hall Station between the Province and TransLink is also signed.

The trolley overhead line relocation to accommodate bus route changes is progressing on schedule. TransLink has also submitted the first set of Systems Safety and Management Plans which provides the Province as a unified safety acceptance standard for the selected proponent's detailed design development of the systemwide installations.

PURPOSE

The purpose of this report is to provide an update of the current progress and upcoming milestones relating to the BSP.

BACKGROUND

The BSP will be an approximately six-kilometre extension to the Millennium Line SkyTrain from VCC-Clark Station to Arbutus Street via a primarily underground alignment beneath the Broadway corridor. The Project will include six new stations. A future phase of investment is required to further extend rapid transit to the University of British Columbia.

Full capital funding confirmation for the BSP was announced on September 4, 2018 by the Federal and Provincial governments. The Province was announced as the delivery agency for the \$2.83 billion project and will own the assets upon completion. TransLink will operate and maintain the extension similar to the rest of the SkyTrain system. The Province as the delivery agency assumes all responsibility for delivery risks, including cost and schedule overrun. A Memorandum of Understanding and Transfer Agreement was signed and was effective October 31, 2018 to formally transfer the Project to the Province and outline TransLink's future role.

DISCUSSION

A. Ongoing Works

BSP Support Agreement (SA)

TransLink's scope on BSP SA includes:

1) Ensure a successful and seamless system integration with the region's SkyTrain service, 2) ensure a safe and reliable service launch, 3) operations and maintenance of the SkyTrain system, 4) provisions of bus services during construction, 5) customer access and notification including smart card and fare installation, as well as system wayfinding and, 6) coordination with InTransit BC for the Canada Line integration at Broadway-City Hall station.

The parties (Province and TransLink) have entered into a SA on June 5, 2020 and includes provisions documenting the roles and responsibilities of the Province and TransLink and relevant funding details.

BSP Integrated Broadway-City Hall Station with Canada Line

The Canada Line Concession Agreement Amendment (CAA) No 14 has been executed. This was done with InTransit BC to confirm the acceptability of the BSP technical requirements for the integrated Broadway-City Hall station. The corresponding commercial terms are addressed in CAA No 16, which was executed in August, 2020. The Integration Agreement for the Canada Line Broadway-City Hall Station between the Province and TransLink was also signed in August. As a result, the three major agreements with InTransit BC are now completed.

Priced Option Items

The Province has provided TransLink with quotations of the two Priced Option Items from the BSP proponents: i) a new Transit Police Hub facility at Broadway City Hall station and, Transit Police sub-offices at Mount Pleasant and Arbutus stations, and ii) using machine-roomless passenger elevators for all stations. The decision to proceed was granted by the Project Steering Committee on July 6, 2020 since they are well within affordability, and a confirmation letter was sent to the Province on July 14, 2020 for acceptance of the quotations.

B. Latest Progress and Upcoming Milestones

BSP Preferred Proponent

The Province issued the RFP for the BSP Engineering, Procurement, Construction/Management (Project Co) in June 2019. The technical and financial portions of the RFP have been closed and the preferred proponent was announced on July 17, 2020.

TransLink Concurrent Works

1. **BC Hydro Early Works** including installation of the duct banks for the power supplies for the tunnel boring machines and early feeds to the future propulsion power substations at four future station locations (Arbutus, Oak, Main and VCC-Clark) have been completed. The project will be closed out and handed over to the Province once the credit is received from BC Hydro for the previous over-payment by TransLink.
2. **Trolley Overhead (TOH) Infrastructure Relocation** to accommodate bus route change in support of bus operations during BSP construction is on schedule. After the relocation, overhead lines that affect BSP will be decommissioned progressively from July to September 2020. Phase I – relocation of Route 16 to 12th Avenue – Arbutus to Granville; Route 17 to 12th Avenue – Oak to Cambie; and, Route 14 to MacDonald - 4th Avenue to Broadway is now complete. Phase II –

removal of the TOH catenary cables and hardware at key areas on Broadway – will be completed on or before September 30, 2020 as scheduled.

3. **System Level Safety and Management Plans** (including System-level Engineering Management Plan, System-level Safety Assurance Plan, System-level Safety Certification Plan, and Parallel Project Management Plan) for CENELEC Compliance Phase 1A are completed and were provided to the Province on June 15, 2020. The next set of documents which describe the objectives and scope of each specified safety certification document in the SA will be provided to the Province before November 1, 2020.
4. **Fibre Optic Cable** 90 per cent design was completed on 15 July 2020. The tender package is anticipated to be ready by early September 2020.
5. **AEER Phase 3 – Construction of the New Computer Room at Operations Maintenance Center 1 (OMC 1) and Vehicle Control Computer (VCC) Upgrades** is now forecasting to be completed in September 2020.
6. **New Operation Control Centre (OCC 2)** rezoning application is in progress. With many engagement efforts between the City and the project team, the Second Reading of the rezoning process has been passed on July 6, 2020 after the First Reading on June 8, 2020 and the Public Hearing held on June 23, 2020. The 60 per cent detailed design has been completed on time and progressing to the 90 per cent design stage.

Integrated Station Developments

Progress on the three developments are as follows:

1. South Granville

Construction has begun on site by the developer, PCI Development, with the demolition of the Royal Bank building. Both the 60 per cent design and final design packages were issued by the Province to TransLink in May 2020 for review and are pending final approval before work will begin on the headhouse shell of the future South Granville station.

2. Great Northern Way

Progress on the Great Northern Way station design and development, by PCI Development, has been delayed due to COVID-19. The delay has no impact to the BSP. The next design submittal from the Province to TransLink is expected to be in Q4 2021.

3. Broadway City Hall

Progress on the Broadway City Hall station design and development is pending on the conclusion of the BSP selected proponent.

C. Current Issues and Mitigations

Arbutus Transit Exchange

A stakeholder group has raised concerns about the planned Arbutus Transit Exchange (a key component of the BSP) regarding its proximity to their premise. The Province's project team continues to lead all the stakeholder and public engagement, with TransLink and the City of Vancouver supporting, as appropriate. TransLink is actively working to address the group's considerations and proposed mitigations.

SkyTrain Advanced Radio Systems (STARS)

The STARS project was initiated to replace the existing SkyTrain radio system which is reaching its end-of-life. Some of the existing network parts were also found to be obsolete. The existing network will continue to be used until the STARS technology is in place which will likely be after completion of BSP. As such, TransLink has sourced, procured, and received reconditioned parts for BSP. The required testing and validation of the reconditioned parts will be conducted by a third party.

SkyTrain Customer and Operations Telecommunications (SCOT)

SCOT consists of equipment and software to manage and transmit voice and data communication between the Operations and Maintenance Centres, trains and stations. In the event that the voice and data communication component of SCOT is not ready for BSP testing and commissioning, the current fallback plan is to continue using the existing Train Radio Information Management System (TRIMS) extension from the existing OCC to OCC 2 for BSP testing and commissioning.

CUSTOMER IMPACT

There is no significant impact to the community for the reporting period.

COMMUNICATIONS

TransLink is working closely with the Province's project team and the City of Vancouver to support a number of communications initiatives, including media announcements and early works activities in the lead-up to construction. Focus remains on notifying nearby residents, businesses and transit customers of updates through media coverage, notifications, websites, and social media.

TO: Board of Directors

FROM: Sany Zein, Vice President, Infrastructure Management & Engineering

DATE: September 15, 2020

SUBJECT: Pattullo Bridge Condition Monitoring Report

EXECUTIVE SUMMARY

This report provides an update on condition monitoring activities on the Pattullo Bridge. TransLink continues to closely monitor and inspect the condition of the Bridge and take corrective action where appropriate. Recent and on-going activities include:

- *Condition Inspection and Repairs* by Mott MacDonald Canada Limited;
- *Railing Inspection and Repairs* by Mott MacDonald Canada Ltd., and Mainroad Contracting Ltd;
- *Deck Condition Monitoring and Repairs* by Mainroad Contracting Ltd. and WSP;
- *Winter Monitoring and Survey* by Northwest Hydraulic Consultants; and,
- *Coordination with Pattullo Bridge Replacement Project*

PURPOSE

This Board Report is a recurring status report that provides an information update on condition monitoring activities on the Pattullo Bridge. The previous report was issued in May 2020.

BACKGROUND

The Pattullo Bridge is 82 years old. Most of the structural components have passed the predicted design life, and some are reaching the end of their useful life. Temperature fluctuation, rainfall, wind, river action, live traffic loads and the aging of the steel and concrete components all contribute to the condition of the bridge. The Province of British Columbia (Province) is leading the Pattullo Bridge Replacement Project, which will construct a new bridge as well as decommission the existing bridge.

With responsibility for the safety and operations of the existing bridge, TransLink monitors the condition of the structure closely through regular inspections, and regularly consults with experienced bridge engineers. Management then performs the necessary maintenance and repairs in response to the inspection findings.

DISCUSSION

Recent and on-going inspection activities are listed in Table 1.

Table 1: June 2020 to August 2020 Pattullo Bridge Ongoing Inspections and Monitoring

REFERENCE	ACTIVITY	CONSULTANTS / PARTNERS	STATUS
1	Condition Inspection and Repairs	Mott MacDonald Canada Limited (Mott) – design consultant	2020 inspection scheduled for Q3
2	Railing Inspection and Repairs	Mott MacDonald Canada Limited (Mott) – design consultant Mainroad Contracting Ltd. (Mainroad)-bridge operations and maintenance contractor	Inspection completed; repairs scheduled for Q3
3	Deck Condition Monitoring and Repairs	Mainroad Contracting Ltd. WSP Global Inc. (WSP) – deck consultant	Ongoing deck monitoring - monthly
4	Winter Monitoring Survey	Northwest Hydraulic Consultants	Monthly monitoring – ongoing Freshet Survey – completed in July 2020.
5	Pattullo Bridge Replacement Project	Province of British Columbia	In Service – Q4 2023

1. Condition Inspection

A walk-through inspection will be conducted by Mott in Q3 2020 to identify rehabilitation/repair items for the remaining service life of the Bridge. Given the scheduled bridge decommissioning by 2023, TransLink’s objective is to keep the bridge operational until replacement, rather than long-term asset preservation.

2. Railing Inspection

As of Q2 2020, all previously identified and required railing repairs have been completed by Mainroad Contracting Ltd. (Mainroad). A new inspection of all bridge railings was performed by Mott in June 2020, and a railing condition report identified new repair items to be addressed by Mainroad. Repairs will be performed in Q3 2020.

3. Deck Condition Monitoring and Repairs

The reinforced concrete deck of the Pattullo Bridge is in an active and advanced state of deterioration, primarily due to corrosion of the reinforcing steel. While repairs to the north portion of the deck between Pier 0 and Pier 9 were completed in the summer of 2016, the risk of pothole formation still exists, particularly for the south approach of the Bridge (Pier 9 to Pier 29).

To ensure the deck remains functional and safe for operations, deck experts from WSP conduct monthly walk-through inspections from the deck, ground and catwalk levels. In the recent surveys, the formation of some potholes in the overlying asphalt was identified. Asphalt spot-repairs are being scheduled during the overnight lane closures, to be completed by Mainroad. At that time, WSP will perform an assessment to determine whether concrete deck repairs are also required. No significant repairs requiring full closure of the Bridge are anticipated in 2020.

Extensive corrosion-related damage is also occurring to the bottom surface (soffit). Debris netting is currently in place to protect the public and other infrastructure, including the railway tracks, from concrete falling from the deck soffit. Additional targeted inspections are scheduled for Q3 2020.

4. Winter Monitoring and Survey

The Pattullo Bridge is situated in the narrowest part of the river, which experiences large tidal fluctuations. This elevates scour and erosion risks. Changing river hydraulics are monitored through bi-annual surveys conducted by Northwest Hydraulic Consultants Ltd (NHC). The recent freshet monitoring survey was conducted in July 2020 and the freshet monitoring report will be submitted to TransLink in Q3 2020.

Due to upcoming in-river works required for Pattullo Bridge Replacement Project and improvements to the CN Rail Bridge, NHC has been conducting monthly bathymetric surveys since February 2019 in the area of the existing bridge. Any substantive changes to riverbed conditions at the bridge piers are reported to TransLink.

Results of the recent bathymetric surveys in June and July indicate the following:

- Substantial riverbed changes around Pattullo Bridge were observed between the June and July surveys, which illustrates how dynamic the riverbed is in this location.
- Launching of riprap material was observed at Pier 5. NHC considers the existing scour protection to be effective for the time being but will continue to monitor the condition of the riprap. Further movement of the material may require upgrades to be performed.
- Further scouring was observed around Pier 6. However, NHC does not consider this to be of immediate concerns and will continue to closely monitor the area for further changes.

5. Coordination with Pattullo Bridge Replacement Project

Efforts to identify a long-term solution for the Pattullo Bridge have been underway since 2006. While TransLink led the project through the conceptual development and planning phases, the Province is delivering Pattullo Bridge Replacement Project. The new bridge remains on schedule for opening in Q4 2023. Management continues to coordinate with the Province as needed for the Replacement Project.

Customer Impact

To minimize impacts on the public, all activities requiring lane and bridge closures are generally scheduled between 10:00 pm and 5:00 am, when volumes on the bridge are lowest. A robust communications plan has been developed to utilize all available channels in support of any closures that impact the public. Inquiries related to the Pattullo Bridge Replacement Project are being directed to the Province's 24/7 telephone line and the Province's project website.

Financial Impact

All monitoring, inspection, and repair work is being performed under existing approved operating and capital funds.

TO: Board of Directors

FROM: Sany Zein, Vice President, Infrastructure Management & Engineering

DATE: September 15, 2020

SUBJECT: Low Carbon Fleet Strategy Implementation Update

EXECUTIVE SUMMARY

The Low Carbon Fleet Strategy (LCFS) provides a framework for the transition to an electric bus fleet aligning with TransLink's greenhouse gas (GHG) reduction targets and provincial/regional climate goals. Phase 2 of the LCFS was completed in 2019 and developed a high-level electrification transition plan for the bus fleet, including financial analysis and estimates of anticipated GHG reductions over a 30-year period.

In February 2020 the Board approved the expenditure of \$104 million from the one-time Federal Gas Tax Transfer (GVRF) towards implementing initial LCFS components. Upcoming actions include the design and construction of an electric-capable Marpole Transit Centre, and electric bus fleet planning and procurement as part of fleet renewal.

PURPOSE

This report provides an update on implementation of the Low Carbon Fleet Strategy (LCFS).

DISCUSSION

The bus electrification transition requires implementing interrelated infrastructure, fleet, and systems investments along with changes in operations and maintenance practices. Program management activities underway include further scope definition, development of a program-level schedules and budgets, and implementing risk management practices. Highlights are discussed below.

Marpole Transit Centre (MTC)

The new MTC in Vancouver will be TransLink's first electric-capable transit centre supporting more than 300 buses. The functional requirements report for the facility was completed in April 2020. Conceptual design commenced in May 2020. The facility is currently projected to be in-service in fall 2024, and the schedule will be further refined during the design stage.

Bus Fleet Procurement and Planning

Procurement for up to 15 battery electric buses closed in early March 2020. Technical and commercial evaluations are being finalized. Once delivered in 2021 these electric buses will enable Route 100 to be the first fully electrified route in the TransLink network.

Considering the updated schedule for MTC, Management plans to replace 57 diesel buses slated for retirement in 2023 through deployment of on-route charge buses from Port Coquitlam Transit Centre instead of via depot charged buses at MTC.

With this change, the same number of diesel buses will be electrified when they are replaced in 2023 as called for in the fleet transition plan. Sufficient funds from the GVRF would remain to equip MTC with

charging infrastructure. However, further funding commitments are required to electrify vehicles due for replacement in 2024 and beyond.

Internal Staff Support

A TransLink Director for Bus Electrification has been appointed and is reporting to the LCFS Executive Steering Committee with cross enterprise representation. Coast Mountain Bus Company appointed a Senior Manager, Low Carbon Fleet Program to lead initiatives related to scheduling, operations, maintenance, resiliency, training and supply chain changes to deliver the Program.

TO: Board of Directors

FROM: Geoff Cross, Vice President, Transportation Planning and Policy

DATE: August 19, 2020

SUBJECT: Broadway Subway Supportive Policies Agreement – 2019 Annual Report

EXECUTIVE SUMMARY

The implementation of the Broadway Subway Supportive Policies Agreement (SPA) includes novel work for the Metro Vancouver region, with the first SPA monitoring report presented here to the Board. While the COVID-19 pandemic has impacted processes for some SPA related projects, the core initiatives committed to in the SPA to maximize effectiveness of this major regional investment are on track with the timing listed in the SPA. This Annual Report provides an important foundation for long-term monitoring of the SPA corridor, providing decision-makers with visibility into partner actions and related outcomes. The SPA partners have been and continue to work together to implement the SPA, having established new and successful approaches to collaborating with a key focus to date being on the development of the Broadway Plan. Reporting to decision-makers on the commitments in the SPA and related outcomes will occur each year in the fall.

PURPOSE

The purpose of this report is to provide the Board of Directors with the 2019 Broadway Subway SPA Annual Report for information.

BACKGROUND

Monitoring of SPAs is an important tool for the region to hold partners accountable for ensuring the success of major regional investments. SPA monitoring is focused on both (1) the SPA commitments, for which a tracking framework has been developed and (2) the related outcomes, for which performance measures and indicators have been developed.

Reporting to decision-makers on the SPA commitments and outcomes will occur in the fall of each year, beginning this year, via either an Annual Report or 5-Year Performance Report. The key differences between the two reports are the level of analysis, with deeper analysis in the 5-Year Performance Reports, and with the 5-Year Performance Reports generally timed to align with Census data releases, to utilize that updated data for population and employment.

The Broadway Subway SPA Monitoring Committee has approved the 2019 Broadway Subway SPA Annual Report, included here as Attachment 1. This Committee is comprised of one or more senior representatives from TransLink, the City of Vancouver, the Province of British Columbia, and Metro Vancouver, and is chaired by TransLink's Vice President of Transportation Planning and Policy.

DISCUSSION

The Broadway Subway SPA is the first SPA to be implemented in Metro Vancouver and thus encompasses work that is novel to the region. While the COVID-19 pandemic has impacted processes for some SPA related projects, commitments remain largely on track with timing as outlined in the SPA.

Collaboration between the SPA partners has been a key focus of SPA implementation, with successful applications of new levels of, and formats for, multi-agency collaboration. The 2019 data presented in this Annual Report provides an important foundation for long-term monitoring of the SPA corridor, recognizing that the COVID-19 pandemic will have significant impacts on the data in the years to come; however, having this long-term view is critical to the objectives for this work.

Working collaboratively to advance the SPA

SPA partners have been meeting regularly to work together to implement, review and monitor compliance with the commitments set out in the SPA. New formats for working together have also allowed for effective inter-agency collaboration, with a key focus to date being on the development of the Broadway Plan. In November 2019, the City of Vancouver hosted the first of three planned housing workshops which will inform the affordable housing strategy component of the Broadway Plan. SPA partners are also working together on the Plan's transportation-related initiatives involving street design and network planning along the corridor. The first of three planned workshops was held in July 2020, with the next session planned for the fall.

SPA commitments on track for SkyTrain-supportive land use and transportation planning

The key land use and transportation commitments in the SPA include: the development of the Broadway Plan, including specific transit-supportive policies related to population and employment growth, affordable housing, and active transportation; bus priority and bus integration planning; and the development of an Area Transportation Plan covering medium to long-term active modes, transit, road network objectives and travel demand management.

The timing for these core SPA commitments is on track, with minor refinements for a small number of initiatives. These refinements include:

- City Core 2050 Plan - replaced by Vancouver Plan, to be completed by the end of 2022 rather than end of 2021;
- Vancouver Employment Lands Study - now referred to as Vancouver Employment Lands and Economy Review (ELER), to be completed by the end of 2020 rather than end of 2019. The results of the ELER will feed into the Vancouver Plan; and
- Bus Priority and Integration Plan – Bus Network Integration Plan to be completed as close to Subway opening day as possible to allow effective integration, rather than end of 2019.

The Monitoring Committee has reviewed and discussed the above refinements and supported the update of this information, which is reflected in the 2019 Annual Report's 'Initiatives Tracker.'

Baseline established for consistent monitoring of SPA related outcomes

To consistently track SPA related land use and transportation outcomes over time, the following have been defined as part of SPA implementation:

- A range of *performance measures and indicators*, to which forecasts for population and employment as well as housing targets will be added in the future once they have been developed as part of the Broadway Plan; and
- An approximate 800 metre *SPA Geography*, to be used for data collection on the defined performance measures indicators.

This first Annual Report establishes the baseline to which future Broadway Subway SPA reports can be compared. The Report presents 2019 City and TransLink data, as well as data from the most recent Census (2016). 2019 was chosen as the base case year given the mid-2018 approval of the Subway Project in a funded investment plan.

Due to the COVID-19 pandemic, comparability issues for certain indicators will need to be addressed in future reporting years. As we collectively face a new set of circumstances in 2020 and the years to come, the data contained in this Annual Report will be instrumental as we track future trends and pandemic recovery within the Broadway SPA corridor, while continuing to work together towards shared goals.

Next Steps

SPA partners will continue to work together to advance the SPA commitments, some of which have initiatives planned for completion or initiation in 2021. Senior partner agency staff on the Monitoring Committee will continue to meet to review progress on the commitments. The next SPA Annual Report will be presented to the Mayors' Council and TransLink Board in fall 2021, with the first 5-Year Performance Report (with updated Census data) to be presented in fall 2024.

ATTACHMENTS

ATTACHMENT 1 – 2019 Broadway Subway SPA Annual Report



**BROADWAY SUBWAY
SUPPORTIVE POLICIES
AGREEMENT**

**ANNUAL REPORT
2019**

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LIST OF ABBREVIATIONS

APC – Automatic Passenger Count
ATP – Area Transportation Plan
PLF – Peak Load Factor
SPA – Supportive Policies Agreement
UBC – University of British Columbia
VGH – Vancouver General Hospital

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EXECUTIVE SUMMARY

In 2014, the 10-Year Vision for Metro Vancouver Transit and Transportation called for the first time in the region's history for major projects to have a Partnership Agreement between TransLink and the project's host municipality. One key component of this agreement was aimed at actions beyond the direct scope of a project yet key to its success - in particular, actions related to land use planning.

In 2018, the City of Vancouver and TransLink executed the Broadway Subway Supportive Policies Agreement (SPA), which committed the City and TransLink to a range of specified actions related to land use, housing, transit, transportation demand management, cycling and walking. A key intent of the SPA was also to ensure collaboration between the City, TransLink, and other relevant agencies, to help achieve the best possible land use/transportation outcomes related to the project.

The purpose of this report is to track progress on the commitments made by the City of Vancouver and by TransLink in the Broadway Subway SPA, as well as to confirm the performance measures that have been developed to gauge the SPA related land use and transportation outcomes.

The report has been developed through the Broadway Subway SPA Monitoring Committee, a group of senior staff officials from the SPA partner agencies, i.e. the City of Vancouver, TransLink, Metro Vancouver, and the Province, per the Monitoring Committee commitments stated in the SPA.

Reporting to decision-makers on the SPA commitments and outcomes will take place in the fall of each year with either an Annual Report (as is the case for the current year) or every five years with a 5-Year Performance Report. The 5-Year Performance Reports will provide more comprehensive analysis of the SPA performance

measures outcomes and, where appropriate, recommendations to decision-makers if progress on commitments and/or outcomes is not tracking as expected. Timing for the 5-Year Performance Reports is set to align with the release of Census updates for the most current population and employment data, and will commence in 2024, the year before the Subway opening.

This first Annual Report for the Broadway Subway SPA documents:

- That the SPA partner agencies have, since the execution of the SPA in 2018, been collaborating in new ways to advance the commitments made in the SPA, and to support aligned land use/transportation planning;
- That the SPA initiatives are largely on track, with limited and minor refinements which are generally administrative in nature; and
- The 2019 baseline data against which future reports can compare the transportation and land use performance measures for the SPA corridor; these performance measures include indicators related to population and employment, housing supply and sustainable transportation.

With the current uncertainties created by the COVID-19 pandemic, it is more important than ever for agencies at all levels to work together to advance the development of sustainable communities. This report documents a new approach our SPA partners have taken for the first SPA implementation in our region and is the beginning of a long-term dialogue for years to come.

BACKGROUND

Developed by the Mayors' Council in 2014, the 10-Year Vision for Metro Vancouver Transit and Transportation (the “10-Year Vision”) identifies as a regional priority rapid transit between Commercial Drive and the University of British Columbia (UBC) along the Broadway Corridor. The 10-Year Vision includes delivery of the first phase of this rapid transit connection (Figure 1), an approximately 5.7 kilometre extension of the Millennium Line from its current terminus at VCC-Clark Station to a new western terminus at Arbutus Street (the “Broadway Subway Project”).

The Call for Major Project Agreements

The 10-Year Vision calls on parties to enter into one or more Project Partnership Agreements whenever the region is making a major investment involving significant cost and risk, the success of which depends on higher degrees of

coordination, collaboration and mutually supportive actions by multiple partners. Per the Vision, the Project Partnership Agreements are to be signed and held between TransLink and the project host municipality and are required prior to funding approval for major projects.¹

Each Project Partnership Agreement is implemented via multiple project agreements, with a key component being the Supportive Policies Agreement (SPA). The key objective of a SPA is to provide surety that the host municipality and TransLink will fulfill defined actions which are outside the direct scope of a project but have significant influence on the project's success. SPA commitments are intended to demonstrate that all parties involved consider support for the transportation investment and its shared objectives to be a top priority.

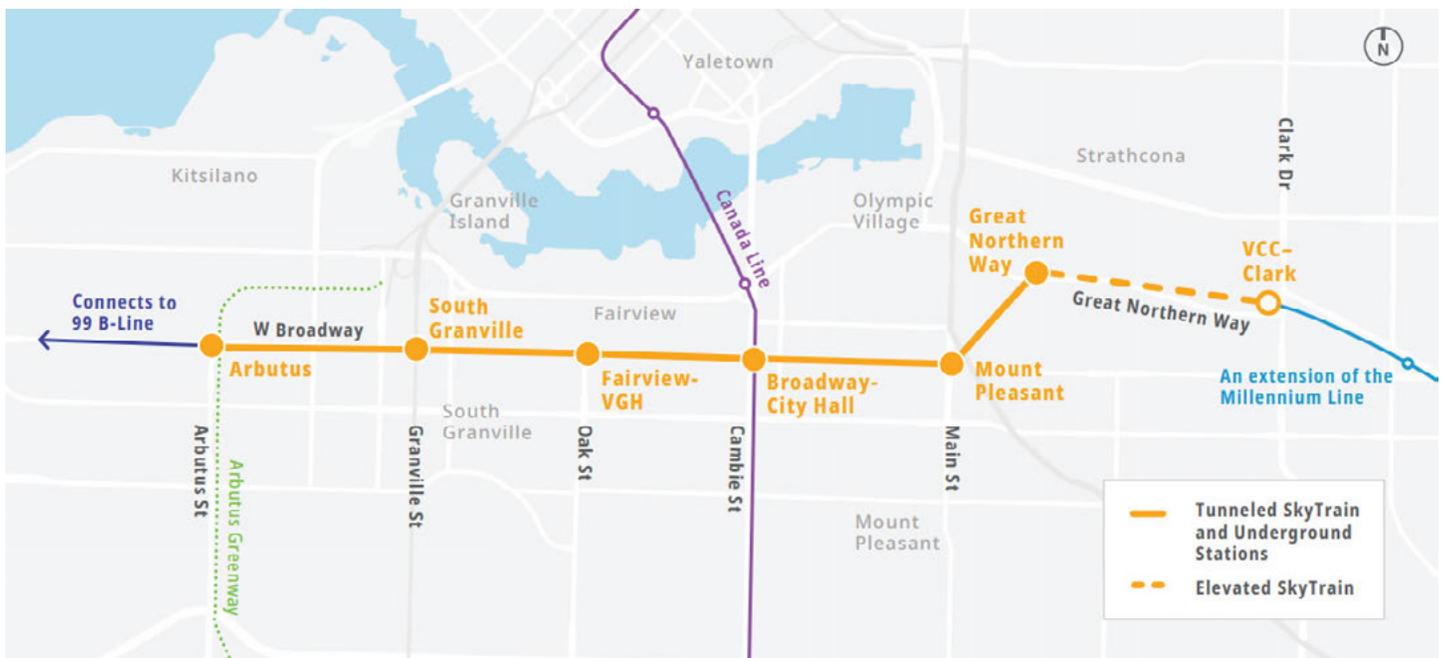


Figure 1: Broadway Subway Project

Source: Government of British Columbia. (2019, October). Broadway Subway Project Brochure. Retrieved March 2, 2020, from <https://engage.gov.bc.ca/app/uploads/sites/396/2019/11/Broadway-Subway-Project-Brochure.pdf>.

¹ With the evolution of the SPAs executed since the 10 Year-Vision, these agreements have come to play an increasingly important role in the senior government funding approval process, including most recently forming a condition of the project's business case approval from the Treasury Board.

Collaborating to Implement and Report on the Broadway Subway SPA

In June 2018, TransLink and the City of Vancouver executed a SPA for the Broadway Subway Project (the “**Broadway Subway SPA**”). In December 2018, TransLink and the City established a multi-stakeholder committee (the “**Monitoring Committee**”) to: (i) review the performance of land use and transportation outcomes for the Broadway Subway Corridor and (ii) monitor compliance by each party with the commitments and responsibilities set out in the Broadway Subway SPA. The Monitoring Committee consists of senior representatives from TransLink, City of Vancouver, the Province of British Columbia and Metro Vancouver, and is chaired by TransLink’s Vice President of Transportation Planning and Policy. A working group comprised of staff from the agencies represented on the Monitoring Committee (the “**Working Group**”) was also established. This Working Group reports to the Monitoring Committee and supports its duties and responsibilities.

Since the execution of the SPA in 2018, partner staff have been working together to

advance the SPA commitments and develop an implementation and monitoring process, which includes defining a structure for reporting to decision-makers (i.e. Mayors’ Council, TransLink Board, City Council, and senior Provincial officials). Through these discussions and building off the direction in the SPA, it was agreed that the two key reporting deliverables would be the “**Annual Report**” and the “**5-Year Performance Report**”, which are described in Table 1.

An implementation and monitoring timeline (the “**Broadway Subway SPA Implementation and Monitoring Timeline**”) has been developed to track the progress of key SPA commitments and delineate when and how SPA reporting will occur, noting that the SPA commits to ongoing reporting until 20 years after Opening Day, or 2045 (whichever is later). The Implementation and Monitoring Timeline can be found in Appendix A. As noted in the table below, SPA monitoring is focused on both the: (i) SPA commitments and (ii) associated outcomes, for which a performance measures framework has been established (the “**Broadway Subway SPA Performance Measures Framework**”).

Table 1: SPA Reporting Deliverables

<i>SPA Reporting to decision-makers every September, via Annual Report OR 5-Year Performance Report:</i>		
	ANNUAL REPORT	5-YEAR PERFORMANCE REPORT
Timing	Every Sept., except in 5-Year Performance Report years; first Annual Report in 2020	Sept. every five years; first 5-Year Performance Report in 2024 (pre-Subway opening) Timed to align with availability of updated Census data
SPA commitments tracking	Tracks progress on all SPA commitments	Tracks progress on all SPA commitments
SPA outcomes tracking	Provides most current data on all SPA performance measures (outcomes) collected on an annual basis	Provides most current data on all SPA performance measures (outcomes) collected on an annual basis, as well as updated Census data
Level of analysis	Provides base analysis of the outcomes monitored, intended as annual progress ‘snapshot’	Provides comprehensive analysis of the outcomes monitored (based on Census update), and may recommend actions if outcomes not tracking as expected

REPORT PURPOSE & STRUCTURE

This report is the first Annual Report for the Broadway Subway SPA and is intended to provide:

- Baseline data to which future SPA reports can be compared, including both Annual Reports and 5-Year Performance Reports (the first 5-Year Performance Report being released in 2024);
- Updates on the progress and status of each of the SPA commitments, including how the SPA partners are working together to collaborate where relevant; and
- The next steps for SPA implementation and monitoring moving forward.

This report is organized into three primary sections, addressing the objectives identified above.

- Monitoring SPA commitments – describes the status of both City led and TransLink led initiatives, providing an overview of the work completed to date, upcoming work and summarizing any refinements to scope and timing.
- Monitoring SPA related outcomes – describes how SPA outcomes will be monitored, including the performance measures, the geographic scope of monitoring, and the approach to data collection and analysis.
- Conclusion and next steps – provides an overview of how SPA commitments are tracking overall, discusses some of the key upcoming initiatives for the next year and describes the approach to future reporting.

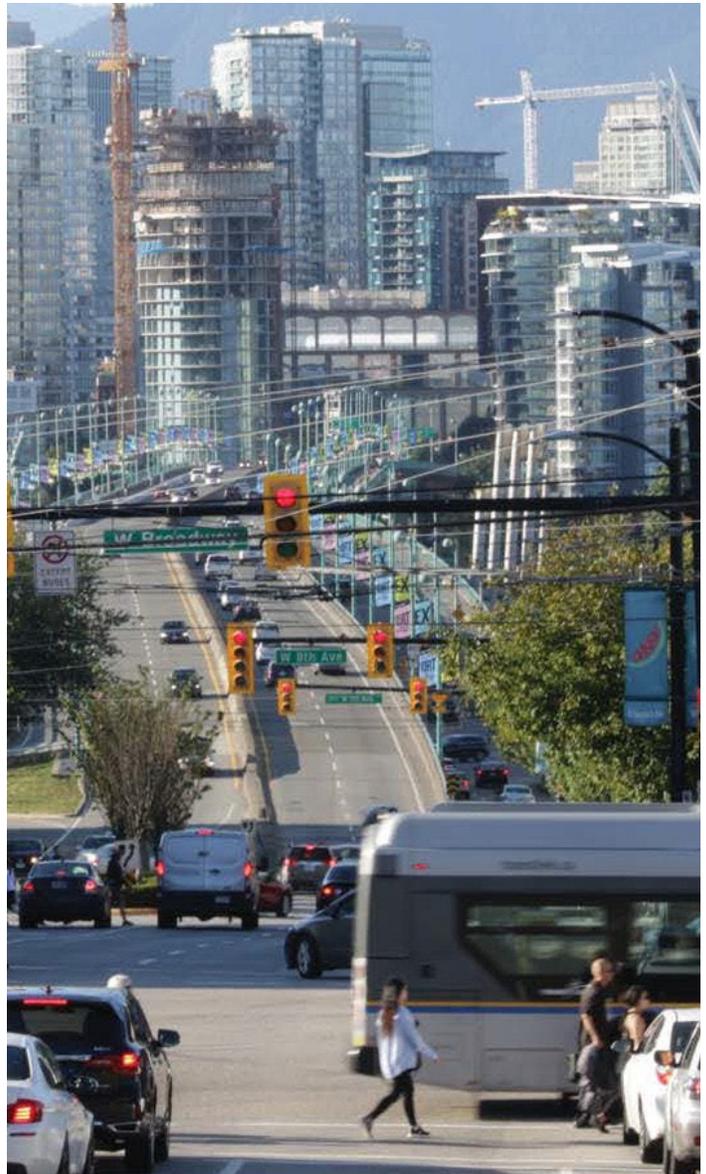


Image source: City of Vancouver

MONITORING SPA COMMITMENTS

A number of City led and TransLink led initiatives were identified in the SPA, most with associated completion dates ranging from 2018 to Broadway Subway 'Opening Day' (currently planned for 2025). Monitoring and reporting on the implementation of SPA commitments and performance measures begins with this report and will continue until 20 years after the Broadway Subway Opening, or 2045, whichever is later (see Figure 2).

The Initiatives Tracker on the next four pages provides a summary of the respective City and TransLink led initiatives committed to in the SPA. The implementation of SPA initiatives is overall on track with the listed completion dates in the

SPA. That being said, the COVID-19 pandemic has impacted all SPA partner agencies and respective project timelines, in particular delaying the Broadway Plan process due to impacts to public engagement. As of now, however, the expectation remains that the core commitments in the SPA can be met according to SPA timelines. Given the continuously evolving situation, partner staff will work closely to keep each other informed of potential timing impacts if/when they arise.

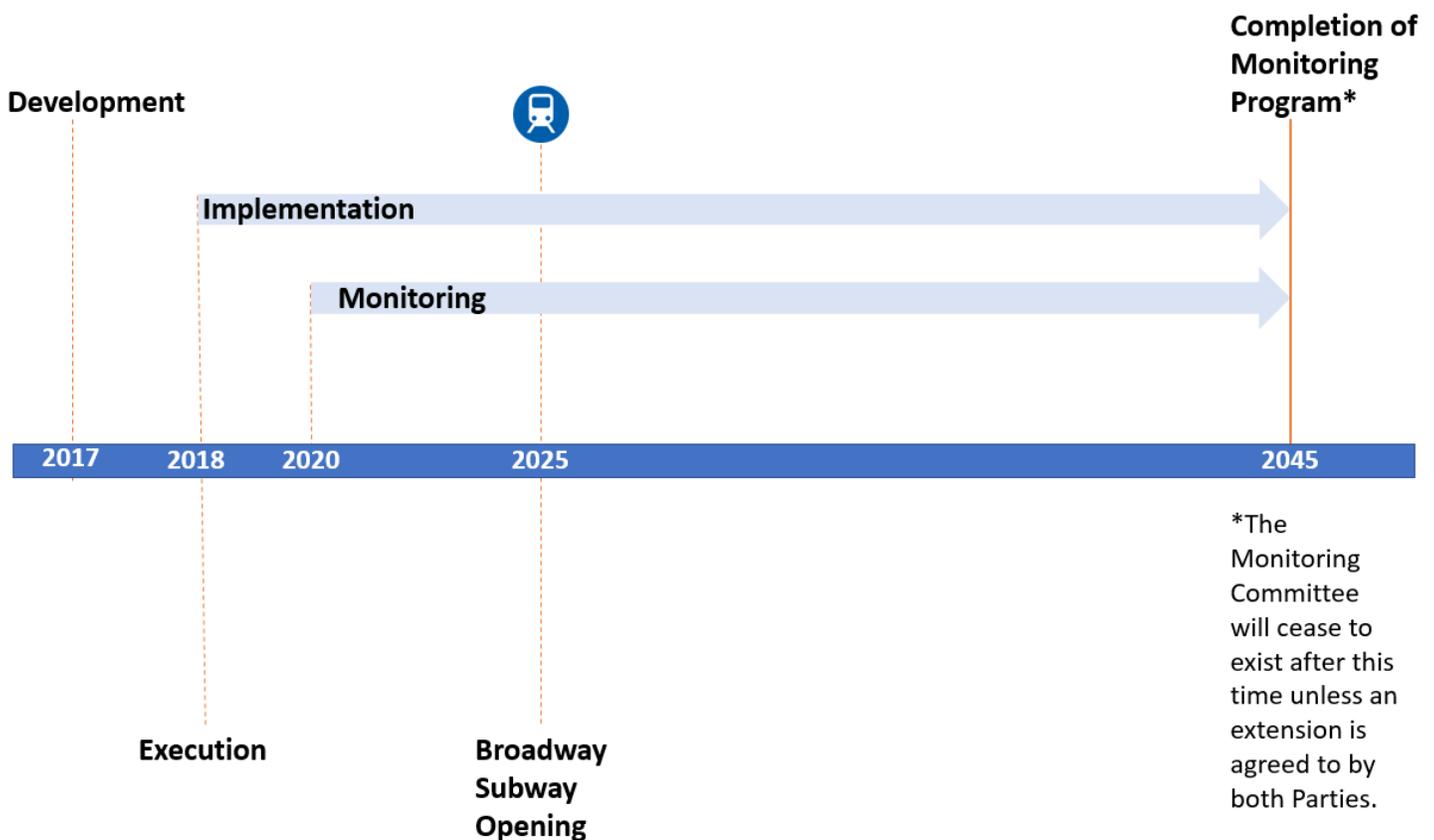


Figure 2: Broadway Subway SPA Timeline

Broadway Subway SPA Initiatives Tracker

City-Led Initiatives	SPA Section	Timing (end of)	Adjustment from SPA	Monitoring Committee (Adjustment)	Progress
Prepare and adopt Vancouver Plan	5.1(a)(i)	2022	City committed to preparing City Core 2050 Plan in SPA, which has since been replaced by the Vancouver Plan	ENDORSED - July 14, 2020	Currently in first phase of Plan process
Prepare and adopt Broadway Plan	5.1(a)(ii)	2021	SPA referred to this as Broadway Planning		Currently in second phase of Plan process
Complete Vancouver Employment Lands and Economy Review	5.1(a)(iii)	2020	SPA referred to this as the Vancouver Employment Lands Study, which was to be completed by end of 2019	ENDORSED - July 14, 2020	Final phase of process on track for completion fall 2020
Collaboration between City, TransLink and Province on the development of land use plans	5.1(c)	Per Plan timing			Collaboration through Broadway Subway SPA Working Group & Monitoring Committee
City will monitor the progress of the Land Use Plans through the Regional Context Statement process	5.2	Per Plan timing			Future initiation
Complete analysis of public land holdings (all levels of government and Crown corporations) for land use opportunities, and the estimated compensation required to each level of government for use of such opportunities	5.3	2021	Analysis to be completed as part of Broadway Plan, as opposed to by end of 2018	ENDORSED – December 12, 2018	Review of public land holdings complete Analysis to be completed as part of Broadway Plan
Parking Bylaw review and update	9.1	Timing not specified			Parking Bylaw update effective January 1, 2019

Legend

	On track		Adjustment from SPA Commitment; endorsed by Monitoring Committee		Not tracking to SPA Commitment, and no Monitoring Committee endorsement
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Broadway Subway SPA Initiatives Tracker (cont'd)

City-Led Initiatives	SPA Section	Timing (end of)	Adjustment from SPA	Monitoring Committee (Adjustment)	Progress
<i>Broadway Plan – Initiatives to be addressed in the Plan</i>					
Develop forecasts for population, dwelling units and employment for years 2025, 2035, 2040 and 2045	5.1(b)	2021			Currently in second phase of Plan process
City will collaborate with TransLink and the Province on the development of the Affordable Housing Strategy (as part of Affordable Housing Strategy: purpose-built rental housing program/policy development, non-market housing needs analysis)	6.1(b)	2021			SPA Intergovernmental Housing Workshops
Existing Affordable Housing Stock Analysis (Rental Housing Stock ODP review, approaches to preservation/replacement of existing stock, mitigation of tenant displacement)	6.2	2021			On track
Provide opportunities for retail and entertainment uses at appropriate locations	6.5	2021			On track
Identify opportunities for office, institutional and industrial uses	6.6	2021			On track
Identify opportunities for community services and amenities	6.7	2021			On track
Street Connectivity and Major Road Network Review and Analysis	7.2	2021			On track
Develop a Cycling Strategy	7.3	2021			On track
Develop a Pedestrian Strategy	7.4	2021			On track
Develop Urban Design Guidelines	8.1	2021			Future initiation
Develop a Public Realm and Streetscape Plan (including Project station areas)	8.2	2022			Future initiation

Broadway Subway SPA Initiatives Tracker (cont'd)

TransLink-Led Initiatives	SPA Section	Timing (end of)	Adjustment from SPA	Monitoring Committee (Adjustment)	Progress
Identify opportunities for washroom access, including at stations, as part of system-wide review of customer washroom facilities	6.7(b)(ii)	2018			Customer Washrooms on Transit Policy adopted (2018) Accommodations for customer accessible washrooms to be provided at Broadway City-Hall and Arbutus stations Implementation Strategy development in progress
Identify opportunities to maintain or enhance bus travel times and reliability	7.1(a)	2019	SPA referred to this as a consolidated 'Bus Priority and Integration Plan'		Bus Speed and Reliability Report completed - provides technical findings and resources for bus priority (2019)
Prepare a Bus Network Integration Plan	7.1(a)	By Opening Day	SPA referred to this as a consolidated 'Bus Priority and Integration Plan'	ENDORSED - July 14, 2020	Future initiation
Provide cost-sharing opportunities for transit priority measures based on approved regional transportation plans and funding	7.1(d)	Timing not specified			Cost-share opportunities provided
Use TravelSmart to encourage alternate modes during and immediately after project construction	7.1(e)	During constrn. & at opening			Future initiation
Update the Vancouver Area Transportation Plan	7.1(f)	2023			Future initiation

Broadway Subway SPA Initiatives Tracker (cont'd)

Monitoring and Reporting	SPA Section	Timing (end of)	Adjustment from SPA	Monitoring Committee (Adjustment)	Progress
The City and TransLink will establish a multi-stakeholder committee (the "Monitoring Committee")	10.1	2018			Completed
The Monitoring Committee will provide City Council, the Mayors' Council, TransLink Board and officials from the Province with an annual dashboard outlining the progress of the Performance Measures and the commitments of each Party as set out in this SPA	10.3(e)	Timing not specified	Rename 'Annual Dashboard' to 'Annual Report'	ENDORSED - July 14, 2020	Annual Report released fall 2020
The City and TransLink will work jointly and cooperatively to prepare a comprehensive report every three to five years	11.1(a)	Timing not specified	Rename 'Comprehensive Report' to '5-Year Performance Report'	ENDORSED - July 14, 2020	5-Year Performance Report to be released in fall 2024
Data collection geographies (400m, 800m, Central Broadway, traffic zones)	5.1(b) & 11.3	N/A	Remove Central Broadway and replace traffic zones with block-level data	ENDORSED - December 12, 2018	
			Streamline data collection to 800m (snapped to city blocks)	ENDORSED - July 14, 2020	

MONITORING SPA RELATED OUTCOMES

Performance Measures Framework

To track the performance of land use and transportation outcomes, partner staff developed the Broadway Subway SPA Performance Measures Framework which identifies a number of indicators associated with the four key areas of SPA monitoring interest:

- Population;
- Employment;
- Housing supply; and
- Sustainable transportation

For each of these four categories, the Performance Measures Framework shown on the following page identifies specific indicators which will be tracked over time, beginning with the 2019 data² provided in the current report. A key responsibility of the Monitoring Committee is to define and refine, as and when needed, the performance measures. The Performance Measures Framework represents a refinement of what the SPA originally identified as “performance measures” and is the product of partner discussions and consensus by both the SPA Working Group and Monitoring Committee.



² 2019 chosen in order to begin reporting in first full data year following Broadway Subway Project funding approval (June 2018).

Image source: TransLink

Broadway Subway SPA Performance Measures Framework

Measure	Indicator	Collection	
		Annually	5 Years
Increase in population	Number of people		✓
	Number of jobs		✓
Increase in jobs	Jobs by industry (using NAICS definitions)		✓
	Amount of non-residential space approved (job space)	✓	
	Number of purpose-built market rental units approved ²	✓	
Increase in affordable housing supply ¹	Number of social and supportive housing units approved	✓	
	Number of condo units approved	✓	
	Number of laneway housing units approved	✓	
	Number of coach house units approved	✓	
	Number of townhouse units approved	✓	
	Rates of car ownership		✓
Increase in sustainable transportation	Transit Performance		
	<ul style="list-style-type: none"> Total annual ridership for Broadway Subway Extension 	✓	
	<ul style="list-style-type: none"> Average daily boardings, alightings, (and line-to-line transfers) by station 	✓	
	<ul style="list-style-type: none"> Average daily bus boardings and alightings 	✓	
	<ul style="list-style-type: none"> Peak load factors by mode³ 	✓	
	Cycling counts	✓	
	Pedestrian counts		✓
	Journey to work mode split		✓

Monitor for potential new metrics to be defined via:

City Parking Bylaw⁴

✓

Broadway Plan's Renter Protections Objectives

✓

Notes

All metrics will be part of Annual Report, but 5-year metrics will only be updated every 5 years e.g. census data

1. First Annual Report housing indicators include existing stock, with subsequent reporting to provide new units approved

2. Rental units will be reported by incomes served and outline the number of units secured at below-market rates

3. Modes include: buses and SkyTrain for Broadway Subway extension once operational

4. Changes to the City's Parking Bylaw to be reviewed with any feasible indicators to be added

Following completion of the Broadway Plan, metrics to be determined for the following (collaboratively developed between City, TransLink and Province): Forecasts for population, dwelling units, and jobs (set years) per 5.1(b) and affordable housing targets per 6.1(a)

Broadway Subway SPA Geography

To consistently track outcomes over time, a defined geography has been established for data collection and outcomes monitoring on the defined performance measures indicators (the “**Broadway Subway SPA Geography**”). The SPA Geography is delineated by city blocks and constitutes an approximate 800 metre walk, using existing walking networks, from the Project stations (see Figure 3).

There are a number of blocks within an 800 metre radius of each station that are not included in the identified buffer such as:

- Blocks that are not within an 800 metre walk from the station due to existing physical barriers (i.e. rail yards in the False Creek Flats area)
- “Superblocks” in Southeast False Creek that have yet to be broken up by an internal street network and with most of the superblock located outside of the 800 metre radius
- Granville Island is outside the City’s jurisdiction

Future changes to the walking network could bring additional areas within an 800 metre walk

of the stations. When these changes happen, the Monitoring Committee will agree on whether or not to add or modify blocks to be included in the SPA Geography. If additional blocks are added at some point by the Monitoring Committee, the Annual Report or 5-Year Performance Report that followed that change would also contain updated data for the previous Annual or (if applicable) 5-Year Performance Report, based on the revised SPA Geography. This would allow for comparable monitoring over time.

Data Collection and Analysis

The City of Vancouver, TransLink, and Metro Vancouver provided the data for this report. All data included in this report are updated either on an annual or five-year basis and are aligned to the SPA Geography, including the Census data, for which a custom dataset was prepared. A full list of the data sources can be found in Appendix B.

While the current report is providing the first year of monitoring data and a description of the performance measures and indicators, future year reports will include data comparisons and analysis related to observed trends over time.



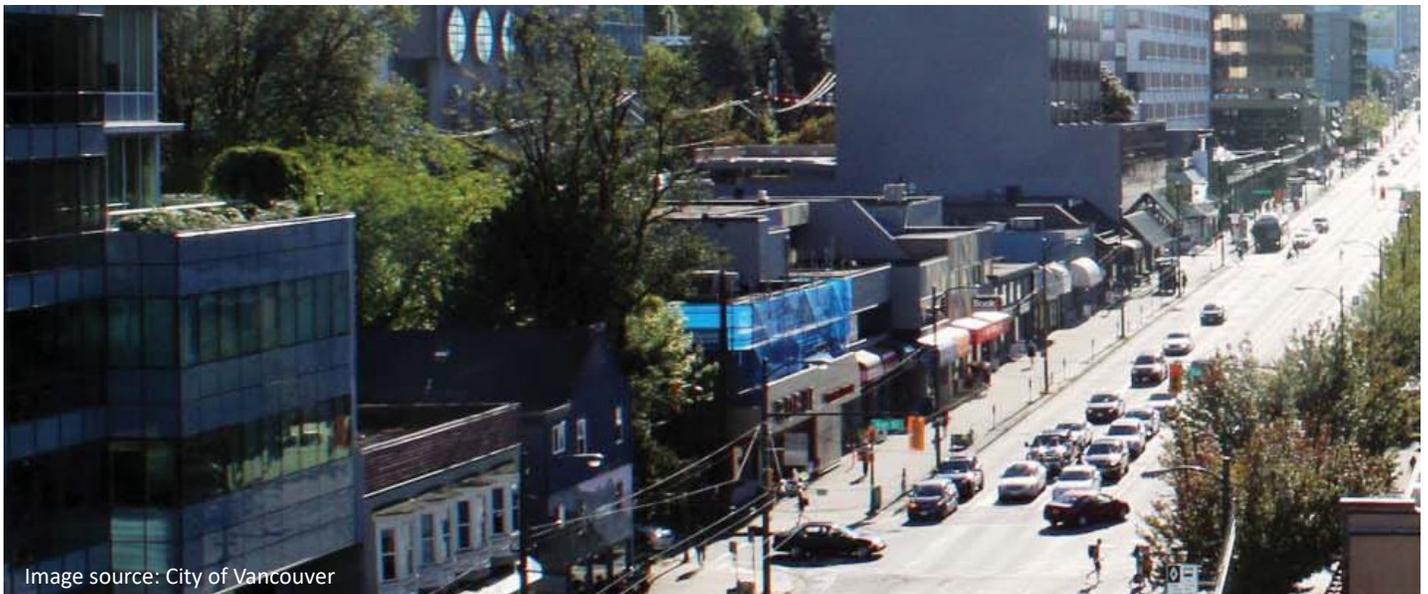
Figure 3: Broadway Subway SPA Geography

There are four indicators reported under the population and employment categories (see Table 2). The number of people, number of jobs and jobs by industry are derived from the most recent (2016) Census.³ Appendix C contains a full breakdown of the jobs by industry.

The amount of job space approved is provided by the City of Vancouver and is based on 2019 data. Through the Broadway Plan, the City commits to preparing population and employment forecasts for set years,⁴ which will be added to SPA monitoring.

Table 2: Population and Employment in the Broadway Subway SPA Geography

Indicator	Total	Source	Year
Number of people	94,000	Statistics Canada	2016
Number of jobs	88,000	Statistics Canada	2016
Jobs by industry ⁵			
<ul style="list-style-type: none"> • Healthcare & social assistance • Prof., scientific & technical services • Retail trade • Accommodation & food services • Information & cultural industries 	<ul style="list-style-type: none"> 16,960 10,120 9,080 6,000 5,870 	Statistics Canada	2016
Job space approved	763,000 sq. ft. (gross)		
<ul style="list-style-type: none"> • Office • Commercial • Industrial • Institutional 	<ul style="list-style-type: none"> 356,600 sq. ft. 178,900 sq. ft. 166,600 sq. ft. 60,900 sq. ft. 	City of Vancouver	2019



3 Jobs by industry numbers are from 2016 Census without undercount. For more information regarding Census undercount, please reference the Statistics Canada webpage.

4 Years include: 2025, 2030, 2035, 2040 and 2045.

5 The five industries with the most jobs in the SPA geography; full breakdown of jobs by industry, using the North American Industry Classification System (NAICS), is shown in Appendix C.

A breakdown of the types of job space approved⁶ by station area is shown in Figure 4. Station area is defined as an approximate 800 metre walk, using existing walking networks, from the various Project stations.

The Great Northern Way station area had the largest proportion of job space approved in 2019, with a total of 416,600 square feet approved. The majority of this added job space was office space, followed by commercial space (retail and hotel). No job space was approved in the South Granville station area.



Image source: City of Vancouver

Job Space Approved by Station Area (2019)

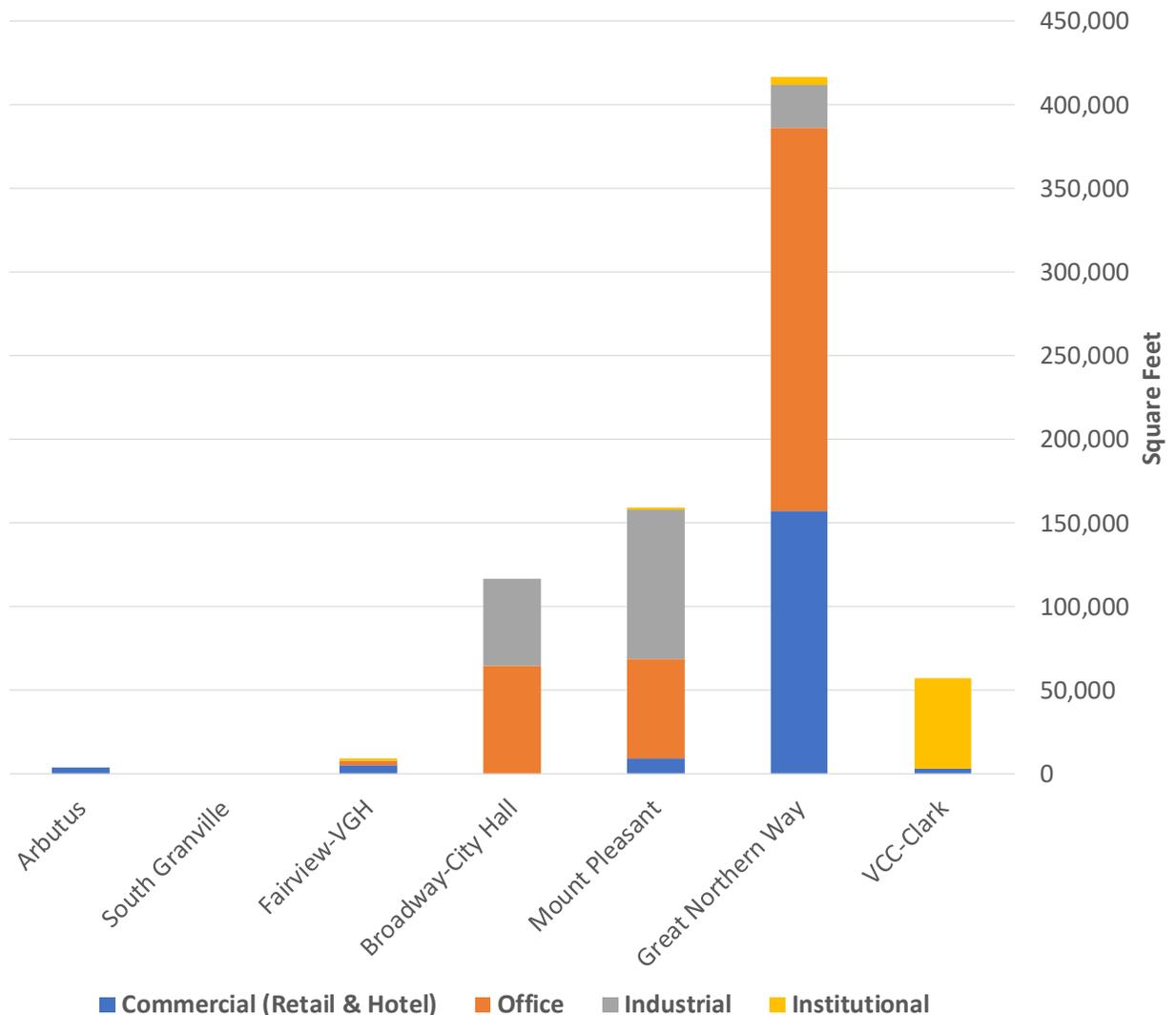


Figure 4: Job Space Approved by Station Area

⁶ For projects enabled under a rezoning process 'approved' refers to when the project is approved at public hearing, and for projects enabled under a development permit process 'approved' refers to when the project has been issued a development permit.

Key housing related objectives of the SPA include both residential densities appropriate for SkyTrain as well as housing affordability, recognizing that reductions to a household's transportation costs lower that household's overall housing and transportation cost burden.⁷ Matching affordable housing supply with demand, particularly in transit-oriented locations such as the Broadway corridor, is an important component of the transit and affordable housing connection.

The housing supply category consists of six indicators that include both affordable and ownership tenures, and which are defined in Appendix D:

- Purpose-built market rental units approved
- Social and supportive housing units approved
- Condo units approved
- Laneway housing units approved
- Coach house units approved
- Townhouse units approved

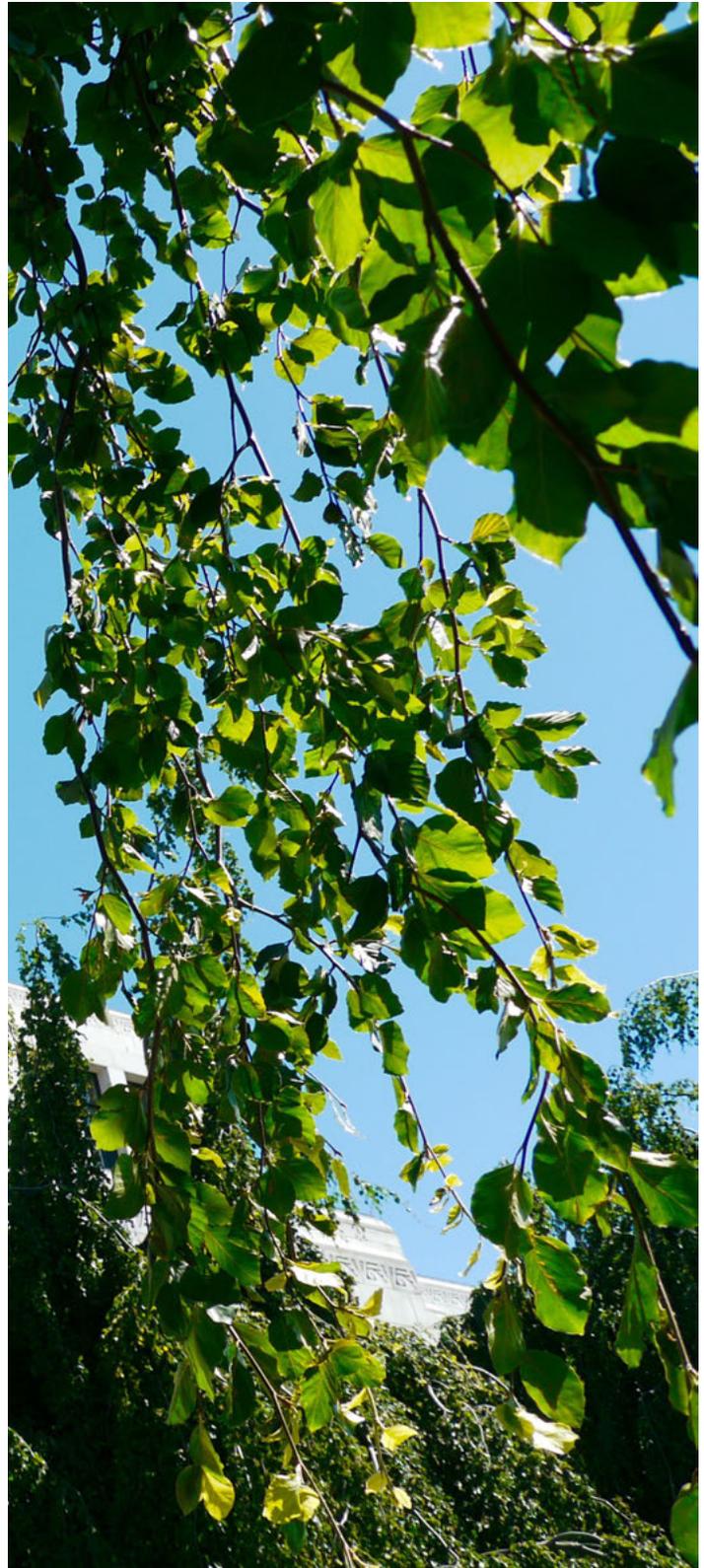


Image source: City of Vancouver

⁷ Metro Vancouver. (2015). [The Metro Vancouver Housing and Transportation Cost Burden Study: A New Way of Looking at Affordability.](#)

The following table (Table 3) provides data on the new housing approvals in the Broadway Subway SPA Geography for 2019, based on the indicators listed on the previous page.

As part of the Broadway Plan, the City will outline affordable housing targets by location, housing type, target income and tenure. These targets will be added to SPA monitoring. Consideration of policy direction for family-sized housing units will also be a part of the Broadway Planning process.

Table 3: New Housing Approvals in Broadway Subway SPA Geography

Housing Type	Existing 2018*		New 2019*		Total 2019	
	# buildings	# units	# buildings	# units	# buildings	# units
<i>Affordable housing stock</i>						
Purpose-Built Market Rental Housing	1,486	20,463	3	72	1,489	21,952
Social/Supportive Housing	113	5,167	1	90	114	5,281
Total	1,599	25,630	4	162	1,603	27,233
<i>Other housing stock</i>						
Laneway Housing	14	14	2	2	16	16
Condominiums			6	361		
Coach Houses	2,041	26,616	10	10		
Townhouses			0	0		
Total	2,055	26,630	18	373		

Notes:

- 'Existing 2018' refers to existing, approved and under construction buildings/units as of December 31, 2018. 'New 2019' refers to new buildings/units approved for the period January 1, 2019 to December 31, 2019. For projects which require a rezoning 'approved' refers to when the project is approved at public hearing, and for projects which do not require a rezoning and are enabled under existing zoning 'approved' refers to when the project has been issued a development permit.
- Data is drawn from City of Vancouver permit systems and Provincial BC Assessment data. Due to discrepancies between the Provincial historic data collection of strata ownership units and municipal tracking systems, 'Existing 2018' baseline building and unit numbers for strata ownership units are estimates and not able to be further broken down by housing type (e.g. townhouse). This is why for annual reporting, new approved condominium units, coach houses and townhouses are reported, but the baseline housing stock numbers are combined for all of those housing types.
- 'New 2019' condominium and townhouse approval numbers are gross rather than net unit counts due to data gaps in municipal tracking systems; purpose-built market rental housing, social/supportive housing, coach houses and laneway housing are net unit counts. 'New 2019' approvals numbers for condominiums, coach houses and townhouses cannot be added to 'Existing 2018' numbers as this would not be an accurate total as the gross approval numbers do not account for units lost through redevelopment.
- For the purposes of the SPA reporting, affordable housing is considered to include purpose-built market rental as well as social and supportive units, recognizing that affordability is a relative measure of the price or cost of housing relative to household income. The social/supportive housing category includes co-operative housing units.
- Secondary suites, defined as an additional unit within a principle residence; including basement suites in detached houses and lock-off suites in townhouses or apartments, are not reported here as the currently available data on this housing type is not sufficient to report accurately on the number of secondary suites within the SPA geography.

While it is difficult to draw definitive conclusions on development trends from a single year of housing approvals, monitoring the change in housing stock year over year will be important to identify emerging trends and assess relative impacts of policy decisions.

total income before taxes. Therefore, in addition to the above SPA indicators for Housing Supply, Appendix E provides additional information on the SPA Geography's 2019 net new affordable housing (social and supportive and purpose-built market rental) by household income served.

Housing affordability is a measure of the price or cost of housing relative to household income with housing commonly considered affordable when it comprises 30 percent or less of a household's

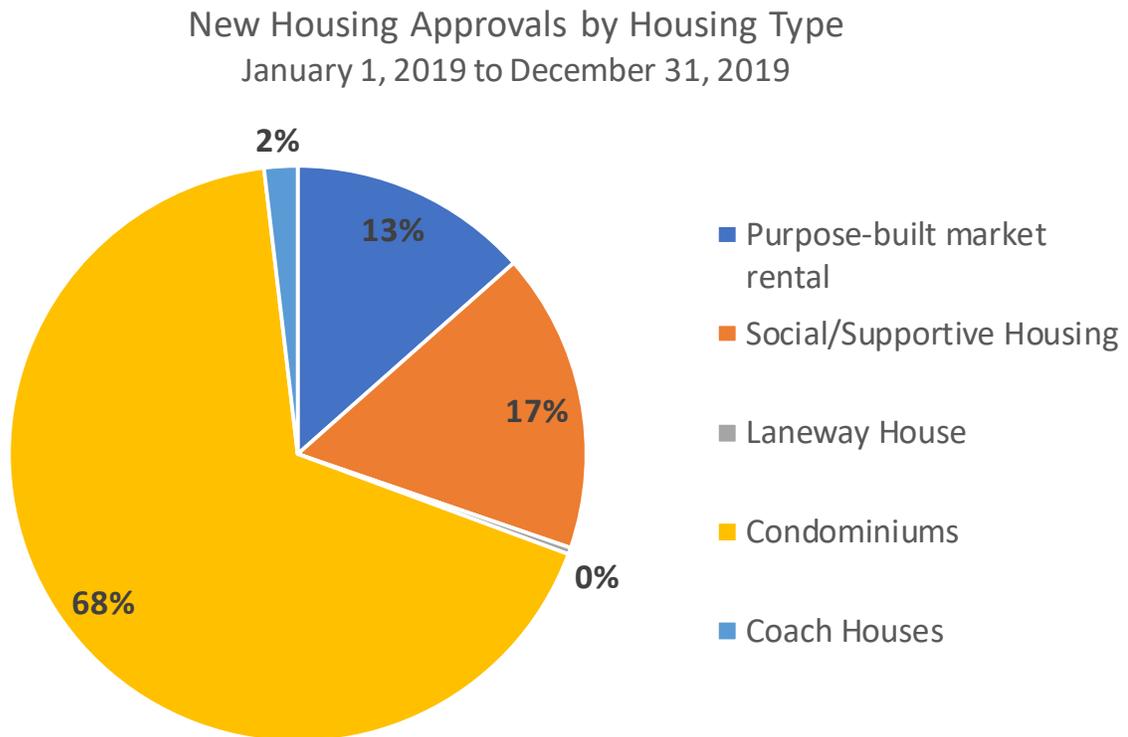
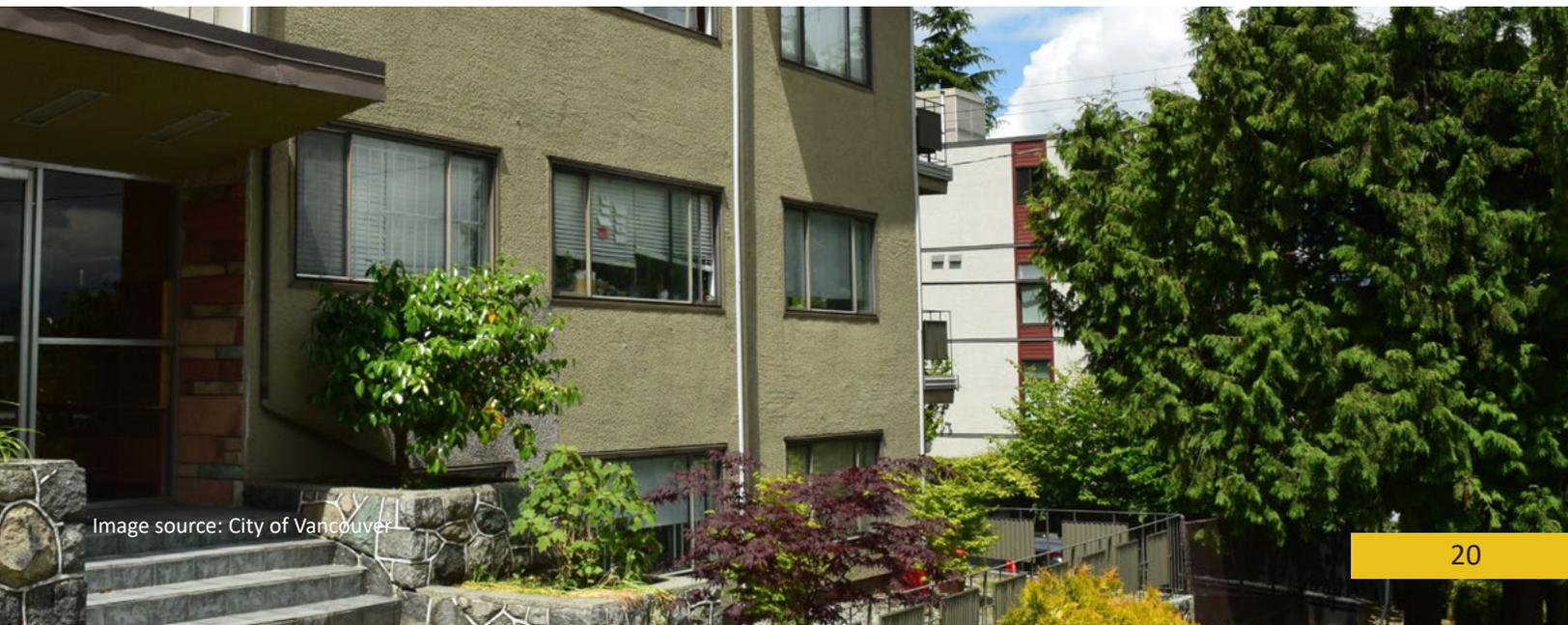


Figure 5: New Housing Approvals January 1, 2019 to December 31, 2019 by Housing Type



Performance Measure 4: Sustainable Transportation

Sustainable transportation for the purposes of SPA monitoring includes walking, cycling, SkyTrain and bus in the SPA Geography, recognizing that these modes are part of the broader City and regional transportation network. A total of seven transportation indicators are included in this report:

- Average daily boardings and alightings by station
- Average daily bus boardings and alightings
- Peak Load Factors by Mode
- Pedestrian Counts
- Cycling Counts
- Journey to Work Mode Split
- Rates of car ownership
- Total annual ridership for Broadway Subway extension⁸

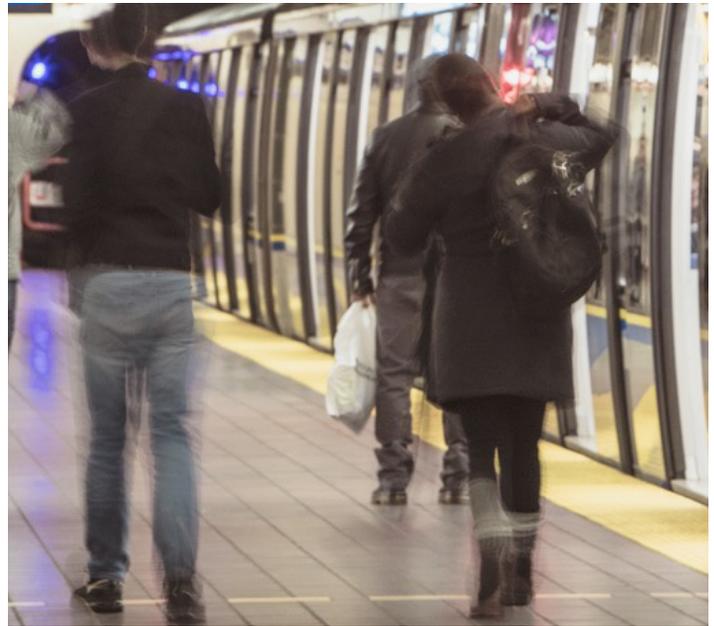


Image source: TransLink

Average Daily Boardings and Alightings by Station

The Broadway Subway Project connects seven stations, two of which are existing as part of the Millennium Line (VCC-Clark station) and Canada Line (Broadway-City Hall station). A Broadway Subway platform will be added to the existing Broadway-City Hall station. The SPA also identifies Commercial-Broadway station as of interest, given that it is a key transfer station on the Millennium

Line and thus station activity for this station will be included in SPA monitoring and reporting.

Average daily boardings and alightings for the various day types in 2019 are provided in Table 4. Data for boardings and alightings is collected through Compass card taps at station fare gates (entries/exits). Behind gate transfer boardings for Commercial Broadway station are provided in Appendix F.

Table 4: Average Daily Station Activity

Station	Activity	Mon-Fri	Sat	Sun	All Day Types
Broadway-City Hall	Boardings	15,000	10,100	7,800	13,300
	Alightings	15,300	10,200	8,400	13,000
Commercial-Broadway	Boardings	25,100	18,300	13,900	23,000
	Alightings	26,000	18,600	14,500	22,200
VCC-Clark	Boardings	3,800	1,300	900	2,600
	Alightings	3,400	1,000	700	2,900

Note: The above figures are rounded values based on TransLink's 2019 Compass data.

⁸ This indicator will be added once the Broadway Subway is operational.

Of the three stations, Commercial-Broadway, which is the third busiest station in the system, had the highest average daily boardings (23,000) and alightings (22,000) for all day types. VCC-Clark station had significantly lower average daily boardings (2,600) and alightings (2,900). Once the Broadway Subway is operational, average daily boardings and alightings will be reported for the following additional stations: Great Northern Way, Mount Pleasant, Fairview-VGH, South Granville and Arbutus.

Average Daily Bus Boardings and Alightings

A total of 18 bus routes operate in the SPA Geography. Seven of these routes also operate a late-night 'NightBus' service. Average daily boardings and alightings for these routes on weekdays (Monday to Friday) in 2019 are provided in Appendix G.

The average daily boardings for those routes operating in the SPA Geography was 90,037 with the average daily alightings being 92,698.⁹ The 99 B-Line (UBC / Commercial-Broadway) had the highest average daily boardings (30,382) and average daily alightings (31,867) in the SPA Geography.



Images source: TransLink

⁹ These data are specific to the bus stops in the SPA Geography and derived from the automated passenger count (APC) data reported in the 2019 Transit Service Performance Review (TSPR).

Peak Load Factors by Mode

Passenger load is a key indicator of transit vehicle occupancy and passenger level of comfort. It is measured using the peak load factor (PLF), which is calculated by dividing the average load on a transit vehicle at its busiest point by the number of spaces (seats plus standing space) provided on each trip. Definitions of load factors for passenger comfort are described in Appendix H.

The three time ranges of interest for this report are the AM Peak (06:00 – 09:00), Midday (09:00–15:00) and PM Peak (15:00 – 18:00). PLFs for the 18 routes operating in the SPA Geography are shown in Appendix I. Once the Broadway Subway is operational, peak load factors for the SkyTrain extension will also be reported.

PLFs that are between 84% and 99% are defined as instances of crowding, with PLFs of 100% and above as instances of overcrowding. Instances of overcrowding are of key interest. Six of the 18 routes (33%) in the SPA Geography exhibited instances of overcrowding in at least one direction and during at least one time range (as defined above). The 99 B-Line (UBC / Commercial-Broadway), which is the busiest bus route in the system, exhibited the most significant instances of overcrowding with PLFs as follows: 134% in the westbound direction during the AM peak, 111% in the westbound direction during midday, and 125% in the eastbound direction during the PM peak.

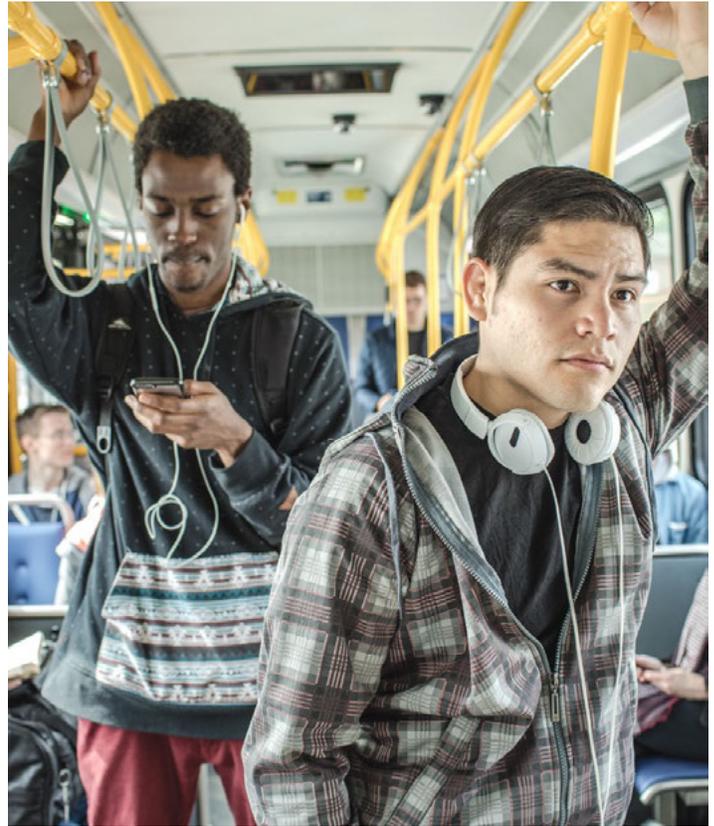


Image source: TransLink

Pedestrian Counts

Given that a key objective of the SPA is to support the success of the Broadway Subway Project, pedestrian counts are significant information, as all transit trips begin and end with some level of pedestrian activity. Tracking pedestrian activity in the SPA Geography further assists the City's efforts to right-size pedestrian infrastructure and respond to street use applications (e.g. sidewalk patios, etc.).

The City of Vancouver conducts a city-wide pedestrian study every 5 years. The most current data on walking in the SPA Geography stems from a pedestrian study done in 2018.¹⁰ The counts are taken between 10am and 6pm on weekdays. The locations for the pedestrian counts within the SPA Geography are shown in Appendix J. As noted earlier, the SPA Geography is delineated by city blocks and constitutes an approximate 800 metre walk, using existing walking networks, from the Project stations. Arbutus and South Granville

station areas each have four blocks counted, Fairview-VGH station area had two blocks counted and Broadway-City Hall and Mount Pleasant station areas each had three blocks counted.

Total daily pedestrian counts for five of the seven station areas are provided in Figure 6. No values for VCC-Clark station and Great Northern Way station areas were collected, as the City does not currently monitor low pedestrian volume streets. That said, it is possible that counts might be undertaken in the future around all Broadway Subway stations; if so, those supplemental counts could be added to future SPA reporting. A detailed breakdown of the pedestrian counts by location and direction for each station area is provided in Appendix K.

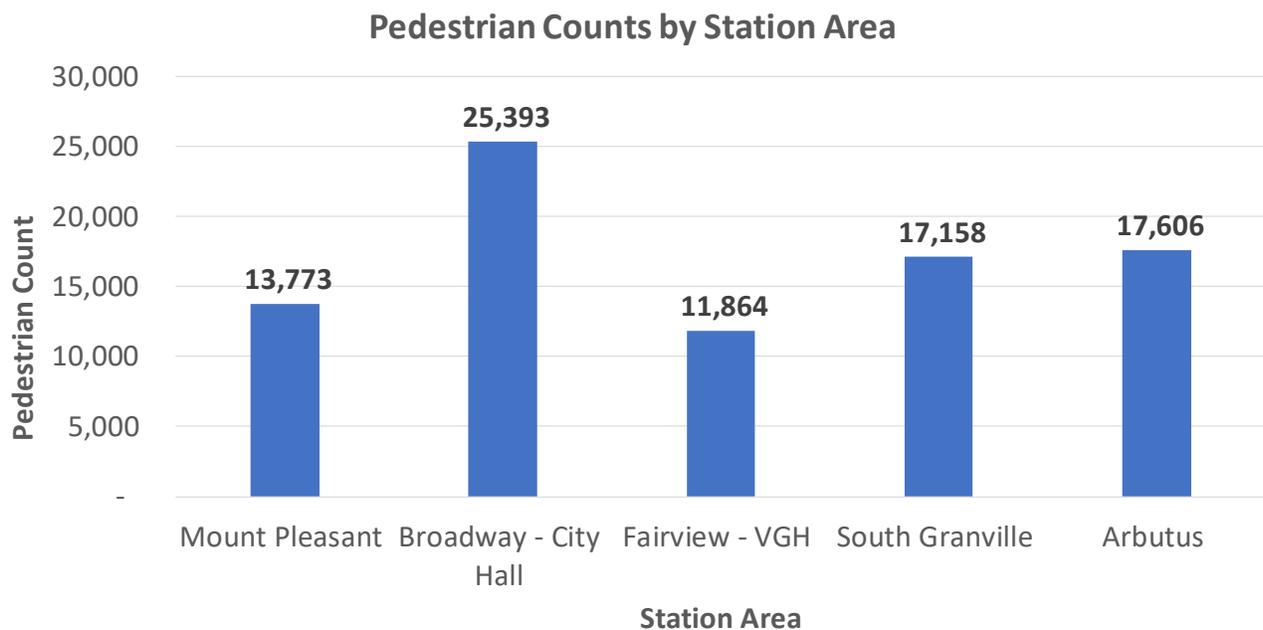


Figure 6: Weekday Pedestrian Counts by Station Area

Note: Counts taken between 10am and 6pm on weekdays.

¹⁰ The City of Vancouver's 2018 pedestrian count data includes people using: motorized/manual wheelchairs or scooters, rollerblades, skateboards, and baby strollers.

In total, there were 85,794 pedestrian counts in the Broadway Subway SPA Geography. The busiest blocks were observed around the area of Broadway-City Hall Station. To put these pedestrian counts in context, the following are the average block pedestrian counts for key streets in the City:

- Robson St. – 14,300
- Granville St. (downtown only) – 17,000
- Commercial Drive – 7,000
- West 4th Ave. – 4,600
- W. Broadway/W. 10th Ave (west of Yew) – 2,400

On average, the pedestrian counts within the Broadway Subway area are comparable with other key streets outside of Downtown (Commercial Drive, West 4th Avenue, and West Broadway/West 10th Avenue west of Yew Street). The exception is the area around Broadway–City Hall Station where the busiest blocks have

pedestrian volumes that rival volumes on some of the busier Downtown streets.

It is important to note that the total values shown represent a limited sample of pedestrian activity in the area, and that the primary interest is in the magnitude of change over time, with the objective being that counts increase in future reporting years with the opening of the Broadway Subway.

Cycling Counts

As with walking, cycling will likewise be an important mode for customers accessing the Broadway Subway, and increased cycling activity over time will be an indication of the SPA Geography’s continued evolution as a community designed to support the SkyTrain investment and sustainable transportation generally.



Image source: TransLink

A total of approximately 3.3 million cycling counts were reported from all day (24 hours) January 1 through December 31, 2019 (see Figure 7). Cycling counts were taken from four permanent bike counters (see Appendix L) located at:

- Burrard Street near Cornwall Avenue (closest to future Arbutus Station)
- E 10th Avenue near Clark Drive (closest to VCC-Clark Station)
- Ontario Street near 11th Avenue (closest to Broadway-City Hall Station)
- Seawall at Creekside Community Centre (closest to future Great Northern Way and Mount Pleasant stations)



Image source: City of Vancouver

The highest number of cycling counts was observed at the Burrard and Cornwall location, with a total of nearly 1.4 million counts in 2019. The location with the least cycling counts was Ontario and 11th Avenue with a total of just under 501,000 counts for the year. While the location-specific numbers provide detailed insight, the key objective is to see the overall number of bike counts increase in future years.

Cycling Counts (2019)

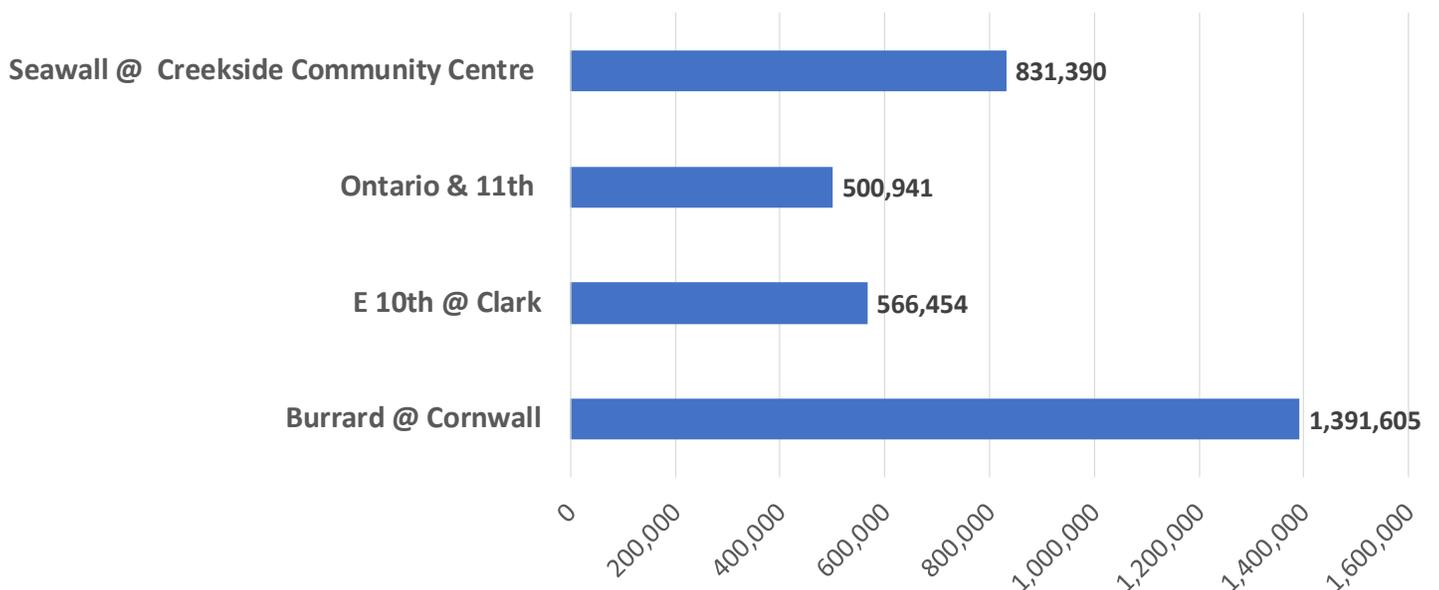


Figure 7: Cycling Counts

Journey to Work Mode Split

Figure 8 shows the main mode of commuting for the employed labour force (aged 15+) residing in private households in the SPA Geography, and who have a usual place of work.^{11, 12} Drivers (car, truck or van) comprised the largest mode share at approximately 48%, followed by public transit (30%), walking (11%) and cycling (6%). In comparison to the city as a whole, the share of sustainable modes (i.e. transit, walking and cycling) in the SPA Geography was notably higher.

Rates of Car Ownership

Rates of car ownership in the Broadway Subway SPA Geography is a useful indicator to track, given the SPA's focus on sustainable modes of

transportation. By providing more sustainable transportation options, the Broadway Subway and related SPA initiatives offers the potential for many to reduce the need for automobile ownership as well as overall household transportation costs. In 2019, the rate of insured vehicles per licensed driver was 0.76, which increased slightly over the previous four years. A detailed breakdown of the 2019 rates by station area can be found in Appendix M. The key objective to tracking rates of car ownership is to observe the rate decrease in future years as the use of sustainable modes increases.

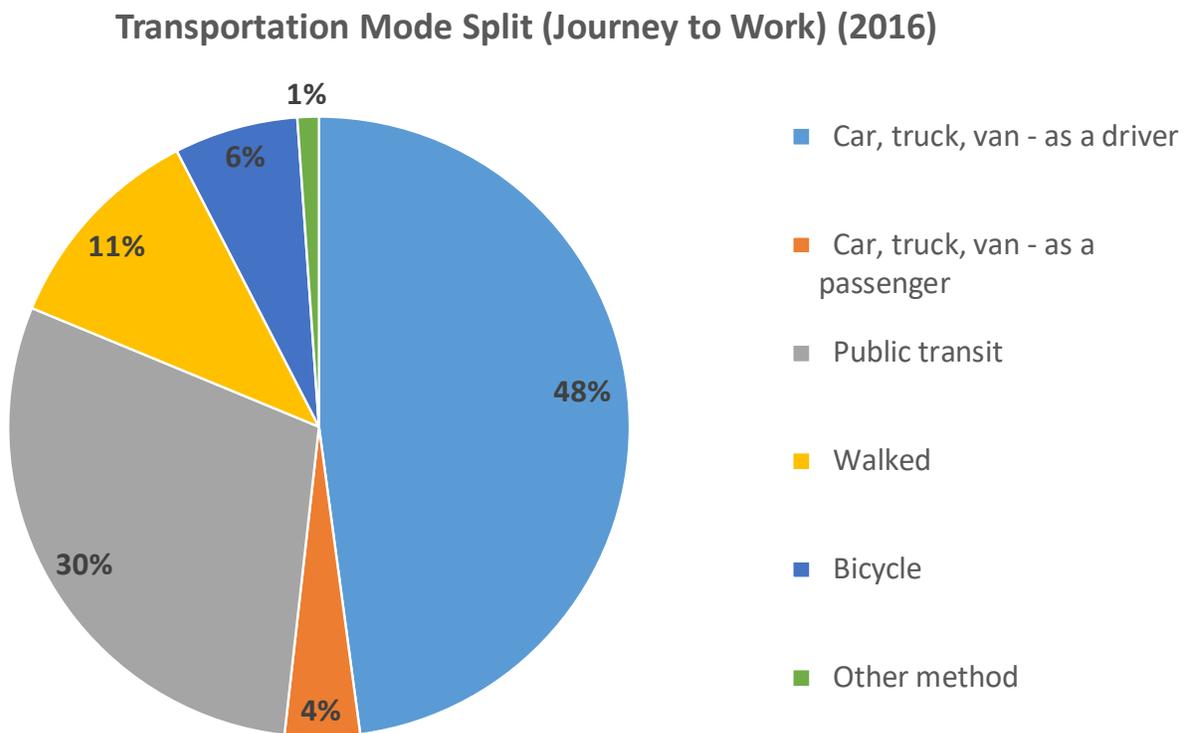


Figure 8: Transportation Mode Split (Journey to Work)

¹¹ Mode share numbers are from the 2016 Census without undercount. For more information regarding Census undercount, please reference the Statistics Canada webpage.

¹² Please reference the Statistics Canada webpage for a detailed definition of usual place of work.

CONCLUSION AND NEXT STEPS

Progress Overview

The implementation of SPA initiatives is overall on track, with minor refinements made to a small number of initiatives which are largely administrative in nature, and which make sense in light of Broadway Subway timing.

The global outbreak of the COVID-19 virus in early 2020 had a marked impact on the timing of the Broadway Plan process due to restrictions on large gatherings, and the associated impacts on public engagement. Prior to the pandemic, the intent was to take the draft Plan for consideration at the December 2020 City Council meeting, one year ahead of the timing listed in the SPA. Despite this pandemic-related setback, the Broadway Plan is still on track to meet the timing listed in the SPA (end of 2021), with City staff planning to bring a draft of the Broadway Plan to City Council for consideration by mid 2021.

Looking to the remainder of 2020 and the next year of SPA monitoring, a number of initiatives are planned for initiation and completion:

Completion by the end of 2020

- The Vancouver Employment Lands and Economy Review
- The Implementation Strategy for the Customer Washrooms on Transit Policy

Initiation in 2021

- TDM initiatives during construction of the Broadway Subway

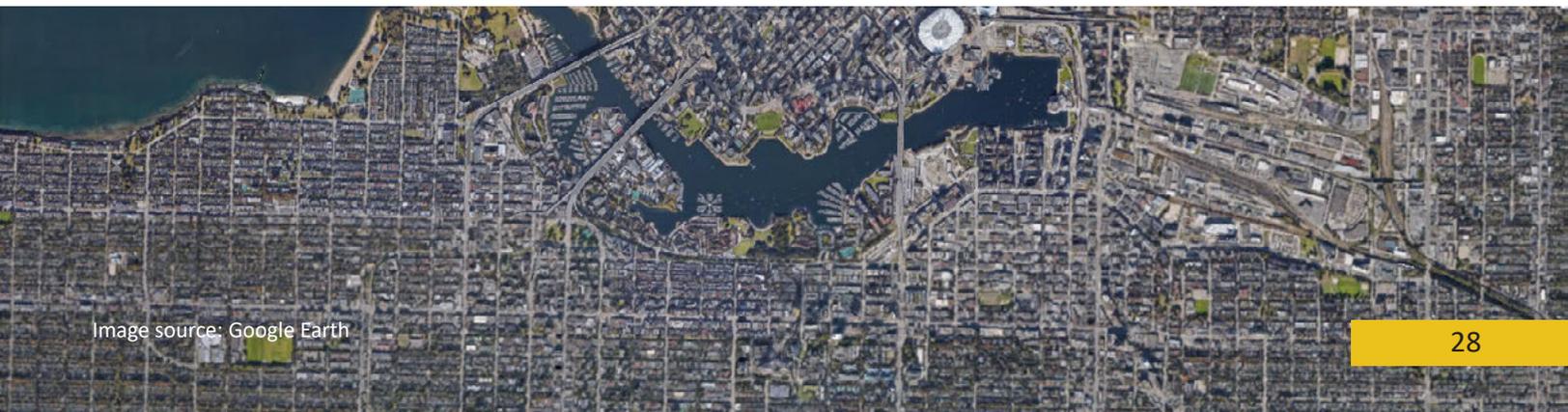
Completion in 2021

- Broadway Plan and related initiatives (e.g. Analysis of Public Land Holdings, Affordable Housing Strategy, etc.)

In terms of the Performance Measures Framework, this first Broadway Subway SPA report establishes the foundation against which the SPA-related outcomes will be compared in the years to come. Due to the COVID-19 pandemic, comparability issues for certain indicators will need to be addressed in future reporting years. As we collectively face a new set of circumstances in 2020 and the years to come, the data contained in this Annual Report will be instrumental as we track future trends and recovery (in the case of transit ridership) within the Broadway SPA corridor, while continuing to work together towards shared goals.

Future Reporting

The next reporting deliverable, the 2020 Annual Report, is planned for release in September 2021. Data from the 2016 Census will not be updated until the next 5-Year Performance Report but will be included in all Annual Reports as context in the interim. The next 5-Year Performance Report will be released in 2024, as the 'pre-Project' case with the first 'post-Project' case to be released in 2029.



GLOSSARY

10-Year Vision – The 10-Year Vision for Metro Vancouver Transit and Transportation, developed by the Mayors' Council in 2014.

Broadway Subway Project – An approximately 5.7 kilometre extension of the Millennium Line from its current terminus at VCC-Clark Station to a new western terminus at Arbutus Street.

Broadway Subway Supportive Policies Agreement (SPA) – The Supportive Policies Agreement for the Broadway Subway Project, executed by the City of Vancouver and TransLink in June 2018.

Monitoring Committee – A multi-stakeholder committee formed by TransLink and the City in December 2018 to: (i) review the performance of land use and transportation outcomes for the Broadway Subway Corridor and (ii) monitor compliance by each party with the commitments and responsibilities set out in the Broadway Subway SPA.

Working Group – A multi-stakeholder staff working group from the agencies represented on the Monitoring Committee that reports to the Monitoring Committee and supports its duties and responsibilities.

Broadway Subway SPA Implementation & Monitoring Timeline – A timeline developed to track the progress of key SPA commitments and delineate when and how SPA reporting will occur.

Annual Report – One of the two primary SPA reporting deliverables; published on an annual basis to provide a high-level snapshot of progress on SPA commitments and outcomes.

5-Year Performance Report – One of the two primary SPA reporting deliverables; published on a 5-Year basis to provide a comprehensive analysis of progress on SPA commitments and outcomes, and may recommend actions if outcomes not tracking as expected.

Performance Measures Framework – A framework developed by partner staff to track the performance of land use and transportation outcomes associated with the four key areas of SPA monitoring interest (population, employment, housing supply and sustainable transportation).

Broadway Subway SPA Geography – A defined geography that will be used for data collection and outcomes monitoring; delineated by city blocks and constitutes an approximate 800 metre walk, using existing walking networks, from the Broadway Subway Project stations.

APPENDIX A - BROADWAY SUBWAY SPA IMPLEMENTATION AND MONITORING TIMELINE

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2045
Broadway Plan & Related SPA Initiatives	[Dark Blue Bar]				Broadway Plan Initiatives Implementation 2022+										
Rental Housing Stock Review	[Dark Blue Bar]														
Area Transportation Plan					[Dark Blue Bar]										
Bus Priority & Integration Planning		[Dark Blue Bar]													
Customer Washroom Policy Review	Policy	Implementation Strategy dev (2019-2020)		Implementation 2021+											
Broadway Subway Opening															
Monitoring Committee Meetings	Q4	Q4	Q3	Q3	Q3	Q3	Q3	Q3	Q3	Q3	Q3	Q3	Q3		Q3
Custom Census Data Releases						Q2-Q3					Q2-Q3				
Annual Reports			Q3	Q3	Q3	Q3		Q3	Q3	Q3	Q3		Q3		
5-Year Performance Reports							Q3					Q3			Q3

NOTES:
 The Monitoring Committee will be responsible for meeting and creating the Performance Report until 20 years after opening day, or 2045, whichever is later, per section 11.1(d).

APPENDIX B - DATA SUMMARY TABLE

Indicator	Data Source	Data Year for this Report	Next Update of Data ¹	Partner Agency Obtaining Data
Number of People	Statistics Canada	2016	2021	Metro Vancouver
Number of Jobs	Statistics Canada	2016	2021	Metro Vancouver
Jobs by Industry	Statistics Canada	2016	2021	Metro Vancouver
Job Space	City of Vancouver	2019	2020	City of Vancouver
Number of purpose-built market rental units approved	City of Vancouver	2019	2020	City of Vancouver
Number of social and supportive housing units approved	City of Vancouver	2019	2020	City of Vancouver
Number of condo units approved	City of Vancouver	2019	2020	City of Vancouver
Number of laneway housing units approved	City of Vancouver	2019	2020	City of Vancouver
Number of coach house units approved	City of Vancouver	2019	2020	City of Vancouver
Number of townhouse units approved	City of Vancouver	2019	2020	City of Vancouver
Rates of car ownership	ICBC	2019	2024	City of Vancouver
Total annual ridership for Broadway Subway extension	TransLink	-	2025	TransLink
Average daily boardings and alightings by station ²	TransLink	2019	2020	TransLink
Average daily bus boardings and alightings ³	TransLink	2019	2020	TransLink
Peak Load Factors by Mode	TransLink	2019	2020	TransLink
Cycling Counts	City of Vancouver	2019	2020	City of Vancouver
Pedestrian Counts	City of Vancouver	2018	2023	City of Vancouver
Journey to Work Mode Split	Statistics Canada	2016	2021	Metro Vancouver

NOTES:

¹ Data collected through the Census is generally released one year following the collection year, with additional time needed for the custom Census data order required for SPA reporting.

² For stations connected by the Broadway Subway Project.

³ For all routes operating in Broadway Subway SPA Geography.

APPENDIX C - JOBS BY INDUSTRY

Jobs by Industry (2016)



NOTE:

Numbers before job sector titles indicate the industry's North American Industry Classification System (NAICS) code.

APPENDIX D - DEFINITIONS OF HOUSING TYPES FOR BROADWAY SUBWAY SPA MONITORING

Source: City of Vancouver Housing Vancouver Strategy & supporting documents

Purpose-Built Market Rental: Multi-family housing built with the intent to be rented in the private market. Includes rental housing secured by legal agreement (i.e. Secured market rental housing guaranteed through a legally binding covenant or housing agreement registered on title).

Social Housing: From City of Vancouver Zoning & Development By-Law which defines as rental housing:

- In which at least 30 per cent of the dwelling units are occupied by households with incomes below housing income limits, as set out in the current “Housing Income Limits” table published by BC Housing
- Which is owned by a non-profit corporation, by a non-profit co-operative association, or by or on behalf of the city, the Province of British Columbia, or Canada
- Is secured by a housing agreement or other legal commitment

Supportive Housing: Subsidized housing with supports that help individuals to maintain housing stability. Supports help tenants stabilize their lives, enhance their independent living skills, and reconnect with their communities. The services provided to tenants are flexible and vary from building to building. Some services are provided by on-site staff, and some services are delivered through outreach programs.

There are several forms of supportive housing available:

- Buildings where all of the units are supportive (dedicated)
- Social housing buildings where some of the units are supportive (mixed)
- In scattered market apartments with rent supplements

Condominium Apartment (“condo”): Units within apartment buildings that are separately strata-titled and can be owned and sold independently or may be rented to a non-owner household. Condominium buildings generally include common amenity areas which are jointly owned and maintained by the strata corporation.

Laneway House: A small, detached home built on a low-density lot at the lane. Laneway homes are permitted in addition to a secondary suite in the main house, and like secondary suites, are for rental or family occupancy only and cannot be strata titled.

Coach House: A small, detached home typically built at the rear of the site adjacent to the lane. The coach house may be strata-titled (sold separately from the main house) unlike laneway homes which are always rental.

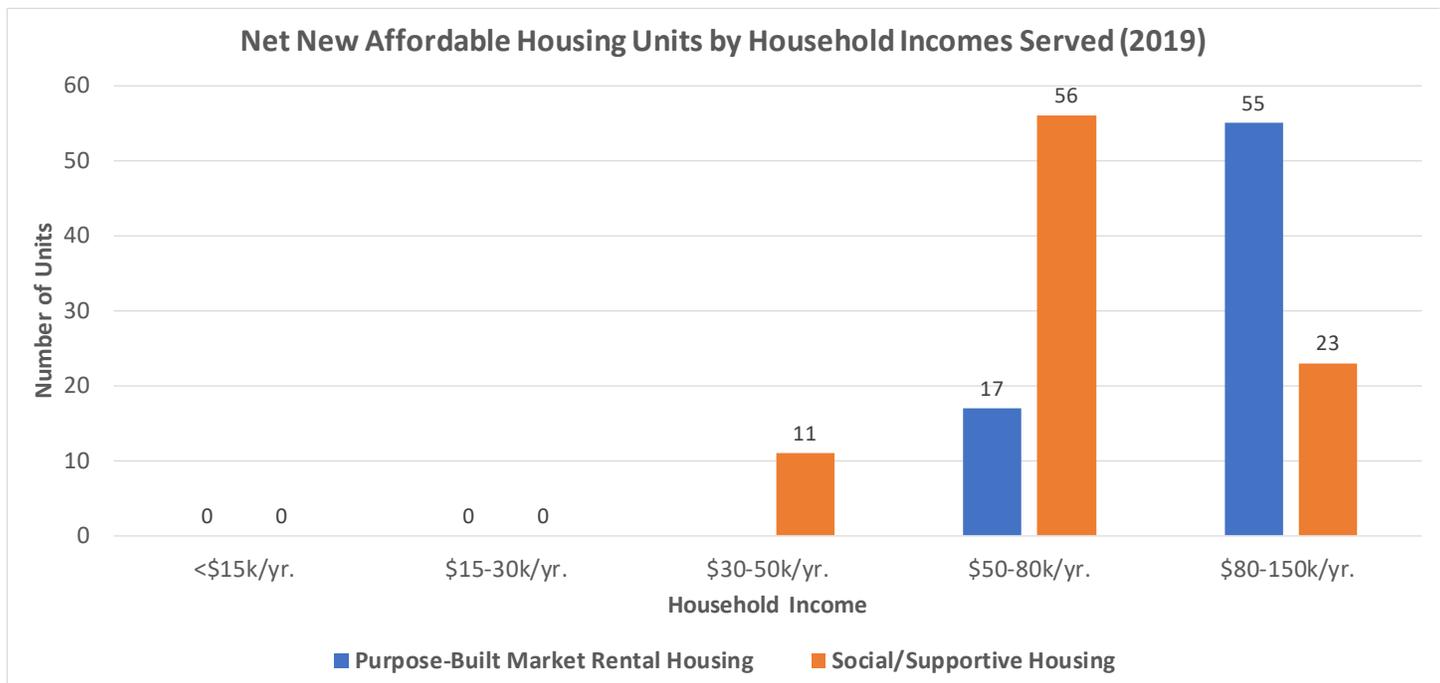
Townhouse: Ground-oriented, multi-family homes which can be a combination of side-by-side and top-and-bottom (‘stacked’) units or a single or double row of attached units with individual entrances from the street or courtyard. Private outdoor space is provided at the ground level and on roof decks.

APPENDIX E - 2019 NEW AFFORDABLE HOUSING UNITS BY HOUSEHOLD INCOMES SERVED

Housing affordability is a relative measure of a household's ability to pay for housing – it relates the price or cost of housing to household income. Housing is considered to be affordable when it comprises 30 per cent or less of a household's total income before taxes. Households paying over 30 per cent of their total income on housing costs are considered to be 'housing cost burdened.' This is particularly relevant for low and moderate income households whose household expenses take a higher overall share of their monthly budgets, whereas higher-income households may be able to absorb higher housing costs.

As noted in the report above, the Metro Vancouver Housing and Transportation Cost Burden Study (2015) also emphasizes the importance of understanding how proximity to transportation alternatives can reduce transportation costs, and therefore the overall household cost burden. Transit choices are especially important for renter households, as demonstrated in Metro Vancouver's Transit-Oriented Affordable Housing Study (Phase 1, 2017), which indicates that renter households, especially those with lower incomes, are more likely to use transit.

The following chart shows net new purpose-built market rental and social/supportive housing units by incomes served – how many units are affordable to a particular household income where that household pays no more than 30 per cent of total income on rent.



The majority of new purpose-built market rental housing approvals in 2019 were affordable to households earning over \$80,000 per year. The majority of new social/supportive housing approvals were affordable to households earning between \$50,000 and \$80,000 per year.

APPENDIX F - BEHIND GATE TRANSFER BOARDINGS AT COMMERCIAL-BROADWAY STATION

Average Daily Boardings at Commercial-Broadway Station (2019)

	Weekday		Saturday		Sunday	
	<i>First-Boardings</i>	<i>Behind-Gate Transfer Boardings</i>	<i>First-Boardings</i>	<i>Behind-Gate Transfer Boardings</i>	<i>First-Boardings</i>	<i>Behind-Gate Transfer Boardings</i>
Expo Line	18,900	15,700	14,100	10,500	10,800	7,300
Millennium Line	6,200	14,700	4,000	9,200	3,100	6,800

NOTES:

First boardings: Estimated number of vehicle entries made by customers, immediately after tapping in at this station.

Behind-gate boardings: Estimated number of vehicle entries made by customers after alighting a vehicle at this station, without exiting the gates between that alighting and this boarding (i.e. transferring).

APPENDIX G - AVERAGE DAILY BUS BOARDINGS AND ALIGHTINGS

Route Number	Average Daily Boardings in SPA Geography			Average Daily Alightings in SPA Geography		
	EB	WB	Total	EB	WB	Total
99 UBC / Commercial Broadway	16,705	13,677	30,382	14,155	17,712	31,867
84 UBC / VCC-Clark Station	3,333	5,396	8,729	5,669	3,383	9,052
44 UBC / Downtown	508	196	704	209	666	875
33 UBC / 29 th Avenue Station	442	603	1,045	536	578	1,114
22 Downtown / Knight	1,025	849	1,874	714	1,177	1,891
19 Stanley Park / Metrotown Station	1,013	1,012	2,025	1,200	968	2,168
17 Oak / Downtown	1,782	1,870	3,652	1,754	1,715	3,469
16 29 th Avenue Station / Arbutus	1,895	1,208	3,103	1,182	1,847	3,029
14 UBC / Hastings	1,794	860	2,654	946	1,677	2,623
9 UBC / Alma / Commercial-Broadway / Boundary	9,960	4,850	14,810	6,703	8,590	15,293
8 Fraser / Downtown	1,618	1,317	2,935	1,804	1,548	3,352
7 Nanaimo Station / Dunbar	1,003	470	1,473	469	1,071	1,540
4 Powell / Downtown / UBC	980	544	1,524	609	1,036	1,645
N19 Downtown / Surrey Central Stn NightBus	33	5	38	19	4	23
N17 Downtown / UBC NightBus	5	9	14	10	12	22
N9 Downtown / Coquitlam Central Stn NightBus	48	15	63	38	19	57
N8 Downtown / Fraser NightBus	25	13	38	27	8	35

Route Number	Average Daily Boardings in SPA Geography			Average Daily Alightings in SPA Geography		
	NB	SB	Total	NB	SB	Total
50 Waterfront Station / False Creek South	1,639	648	2,287	657	1,492	2,149
20 Victoria / Downtown	-	3,497	3,497	-	3,181	3,181
15 Cambie / Olympic Village Station	417	839	1,256	741	555	1,296
10 Granville / Downtown	2,192	1,205	3,397	1,168	2,284	3,452
3 Main / Downtown	2,381	2,109	4,490	1,938	2,551	4,489
N20 Downtown / Victoria NightBus	-	25	25	-	46	46
N15 Downtown / Cambie NightBus	4	2	6	3	4	7
N10 Downtown / Richmond NightBus	2	14	16	11	12	23
ALL ROUTES IN SPA GEOGRAPHY	Average Daily Boardings		90,037	Average Daily Alightings		92,698

NOTES:

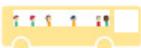
Data is specific to the bus stops in the SPA Geography and derived from the automated passenger count (APC) data reported in the 2019 Transit Service Performance Review (TSPR).

Data is weighted per stop/line.

Data is drawn from the SEPT19 truncated sheet (September 2 to December 15, 2019).

APPENDIX H - DEFINITIONS OF PASSENGER COMFORT

Source: TransLink Transit Service Guidelines (2018)

LOAD FACTOR (% OF CAPACITY UTILIZED)	RAPID SERVICE TYPE	ALL OTHER SERVICE TYPES
 100% or higher	<ul style="list-style-type: none"> » All seats are full and all standing space is occupied. » The vehicle is overcrowded, and accessing the doors may be difficult for many passengers. » Standing passengers will need to step off the bus to let others exit. » Pass-ups are likely at some stops. 	
 84% to 99%	<ul style="list-style-type: none"> » All seats are full and most standing space is occupied. » The vehicle is crowded, and accessing the doors may be difficult for some passengers. » Standing passengers will need to shift position as other passengers board/exit. 	
 67% to 83%	<ul style="list-style-type: none"> » All seats are occupied, and half of the passengers are standing. » Some passengers will have to move around for others to board or exit the train. 	<ul style="list-style-type: none"> » All seats are occupied, and several passengers are standing. » Some passengers may have to move around for others to board or exit the bus.
 51% to 66%	<ul style="list-style-type: none"> » All seats are occupied, and about one-third of all passengers are standing. » Boarding or exiting the train occurs without difficulty. 	<ul style="list-style-type: none"> » Most seats are occupied, and a few passengers are standing. » Boarding or exiting the bus occurs without difficulty.
 34% to 50%	<ul style="list-style-type: none"> » All seats are occupied, and about one-quarter of all passengers are standing. » Boarding or exiting the train occurs without difficulty. 	<ul style="list-style-type: none"> » Most seats are occupied, and people need to sit next to each other if they want a seat. » Passengers standing are doing so by choice, not necessity.
 0% to 33%	<ul style="list-style-type: none"> » Seats may be available for some boarding passengers. » A few passengers will choose to stand. 	<ul style="list-style-type: none"> » Half of the seats (or less) are occupied, and no passengers are standing. » Few passengers need to sit next to someone. » Passengers have some freedom in where they can sit.

Note: The load factor range may change as the number of seats on a vehicle changes. Descriptions of load factors for passenger comfort are adapted from the Transit Capacity and Quality of Service Manual.

APPENDIX I - PEAK LOAD FACTORS BY MODE

Route Number	Time Period	Peak Load Factors	
		EB	WB
99 UBC / Commercial Broadway	AM Peak	55%	134%
	Midday	91%	111%
	PM Peak	125%	76%
84 UBC / VCC-Clark Station	AM Peak	64%	90%
	Midday	71%	60%
	PM Peak	94%	65%
44 UBC / Downtown	AM Peak	86%	56%
	Midday	67%	53%
	PM Peak	103%	72%
33 UBC / 29 th Avenue Station	AM Peak	25%	70%
	Midday	50%	46%
	PM Peak	50%	31%
22 Downtown / Knight	AM Peak	22%	91%
	Midday	64%	81%
	PM Peak	80%	39%
19 Stanley Park / Metrotown Station	AM Peak	51%	87%
	Midday	65%	60%
	PM Peak	95%	59%
17 Oak / Downtown	AM Peak	59%	62%
	Midday	56%	53%
	PM Peak	72%	50%
16 29 th Avenue Station / Arbutus	AM Peak	105%	57%
	Midday	72%	60%
	PM Peak	82%	81%
14 UBC / Hastings	AM Peak	102%	68%
	Midday	66%	57%
	PM Peak	103%	83%
9 UBC/Alma/Commercial-Broadway/Boundary	AM Peak	60%	80%
	Midday	52%	68%
	PM Peak	84%	55%
8 Fraser / Downtown	AM Peak	26%	53%
	Midday	33%	27%
	PM Peak	53%	28%
7 Nanaimo Station / Dunbar	AM Peak	92%	30%
	Midday	56%	42%
	PM Peak	80%	72%
4 Powell / Downtown / UBC	AM Peak	90%	46%
	Midday	70%	48%
	PM Peak	89%	67%

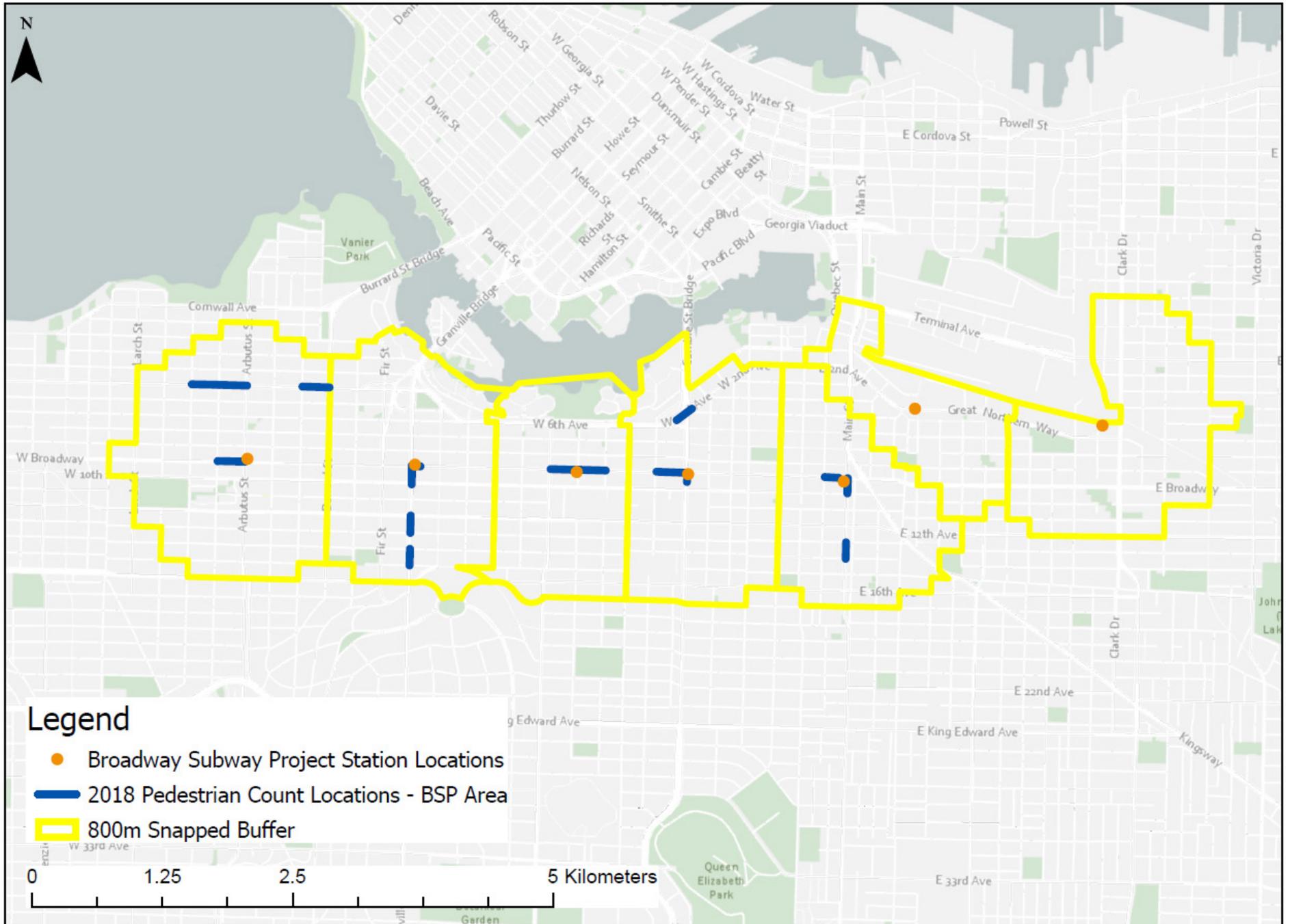
Route Number	Time Period	Peak Load Factors	
		NB	SB
50 Waterfront Station / False Creek South	AM Peak	51%	51%
	Midday	68%	47%
	PM Peak	90%	43%
15 Cambie / Olympic Village Station	AM Peak	35%	34%
	Midday	21%	34%
	PM Peak	33%	71%
10 Granville / Downtown	AM Peak	71%	28%
	Midday	43%	40%
	PM Peak	59%	71%
3 Main / Downtown	AM Peak	70%	33%
	Midday	43%	50%
	PM Peak	43%	73%

NOTES:

Data is specific to the SPA Geography.

Data is based on weekdays (Mon. - Fri.) and all year 2019.

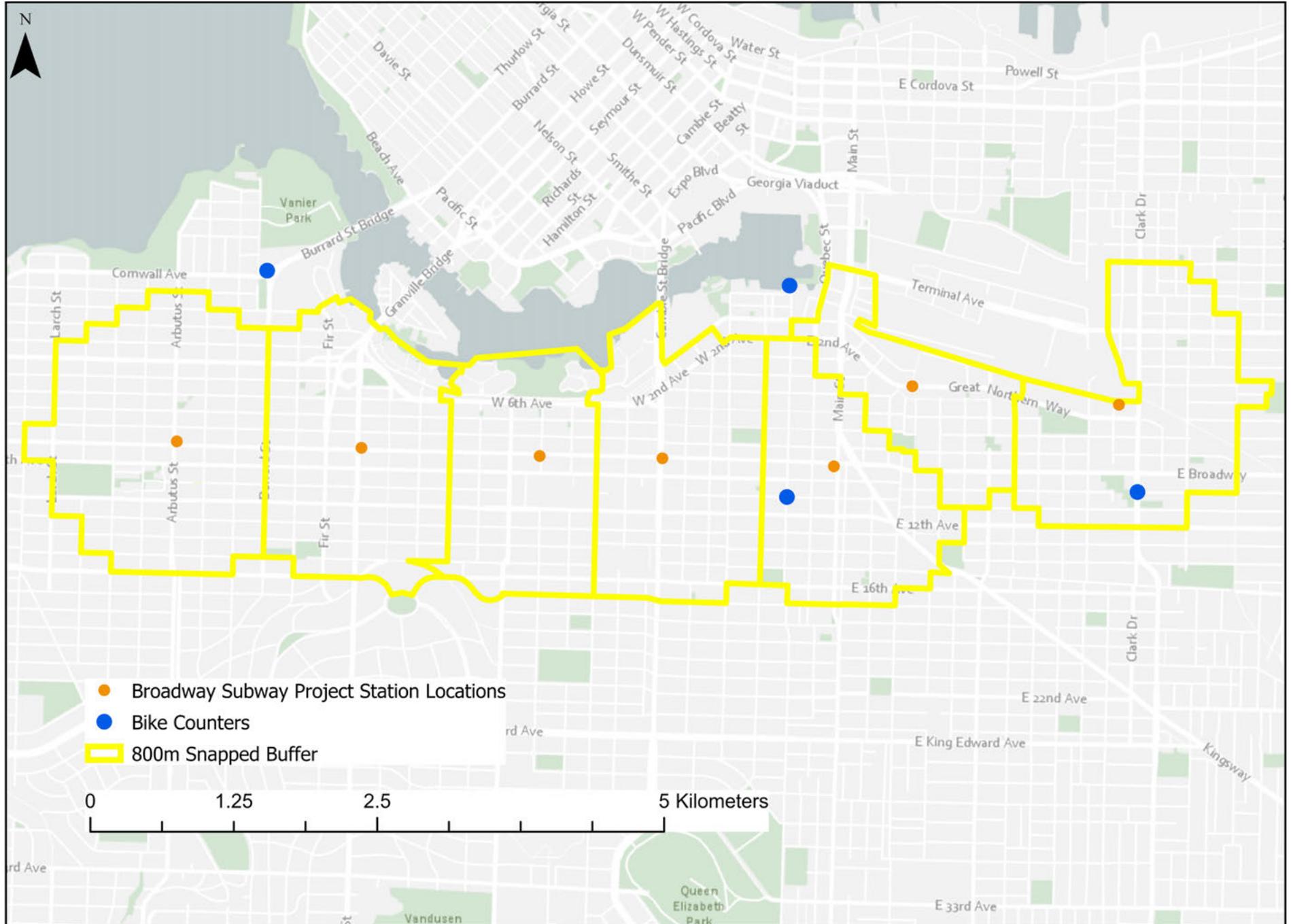
APPENDIX J - PEDESTRIAN COUNT LOCATIONS



APPENDIX K - PEDESTRIAN COUNTS BY STATION AREA

Station Area	Address	North Sidewalk		South Sidewalk		West Sidewalk		East Sidewalk		Total	Station Area Total
		From East	From West	From East	From West	From North	From South	From North	From South		
Mount Pleasant	2900 Main St					1,105	860	1,084	1,161	4,210	
	2500 Main St					1,234	1,037	913	1,011	4,195	13,773
	100 E Broadway	2,147	1,619	621	981					5,368	
Broadway - City Hall	500 W 2nd Ave	970	1,158	93	137					2,358	25,393
	2500 Cambie St	2,068	2,174	1,696	2,632					8,570	
	500 W Broadway	4,660	4,573	2,142	3,090					14,465	
Fairview - VGH	900 W Broadway	1,508	1,650	569	609					4,336	11,864
	800 W Broadway	2,712	2,501	937	1,378					7,528	
South Granville	2800 Granville St					1,074	866	1,065	1,157	4,162	17,158
	3000 Granville St					469	509	516	620	2,114	
	2500 Granville St					1,563	1,284	1,413	1,862	6,122	
	1400 W Broadway	1,358	1,015	1,178	1,209					4,760	
Arbutus	2100 W Broadway	892	540	1,111	1,304					3,847	17,606
	1800 W 4th Ave	801	591	552	710					2,654	
	2200 W 4th Ave	1,401	1,403	935	961					4,700	
	2100 W 4th Ave	1,746	1,488	1,620	1,551					6,405	

APPENDIX L - BIKE COUNTER LOCATIONS



APPENDIX M - RATES OF CAR OWNERSHIP BY STATION AREA

Station Area	Number of Licensed Drivers	Number of Insured Vehicles	Rate of Insured Vehicles per Licensed Driver
Arbutus	14,741	10,118	0.69
Broadway - City Hall	7,406	7,729	1.04
Fairview - VGH	9,632	7,154	0.74
Great Northern Way	5,166	3,532	0.68
Mount Pleasant	8,367	5,675	0.68
South Granville	12,280	9,272	0.76
VCC – Clark	7,666	6,300	0.82
TOTAL	65,258	49,780	0.76

NOTES:

Data provided by Insurance Corporation of British Columbia and aligned to the SPA Geography.

Counts are as of December 31, 2019.

Vehicle counts include all vehicle types (e.g. passenger, commercial, motorcycles, motor homes, and trailers) and policy types (Autoplan, temporary and storage).

Vehicles are categorized into geographic boundaries based on customers' postal codes and are based on mailing address which may not necessarily represent where the vehicle is used or parked.

TO: Board of Directors

FROM: Sany Zein, Vice President, Infrastructure Management and Engineering
Geoff Cross, Vice President, Transportation Planning and Policy

DATE: September 15, 2020

SUBJECT: Surrey Langley SkyTrain Project Update

EXECUTIVE SUMMARY

In December 2018, the Mayors' Council and TransLink Board directed Management to proceed with development work for a SkyTrain on Fraser Highway project and to initiate a planning process to refresh the South of Fraser Rapid Transit Plan. The available budget for this scope is \$30 million, with target completion in Q3 2020.

In January 2020 the Mayors' Council and the TransLink Board endorsed the final draft Business Case and directed it to be submitted to senior government for their approval. The draft Business Case describes the full Surrey to Langley project, and recommends construction in stages consistent with available funding. Stage 1 consists of 7 kilometers from King George to Fleetwood with four new stations at a cost of \$1.63 billion. Stage 1 will be delivered by TransLink using a Design Build Finance (DBF) procurement model. Management continues to work with Senior Government to secure project and funding approval.

PURPOSE

This report provides an update on the Surrey Langley SkyTrain (SLS) Project.

BACKGROUND

In December 2018, the Mayors' Council and Board directed Management to proceed with development work for the Surrey Langley SkyTrain project, and to initiate a planning process to refresh the overall South of Fraser Rapid Transit Plan. A budget of \$30 million was approved for this purpose in January 2019.

The outcomes of the project development phase have been documented in the project draft Business Case. In January 2020, the Board and the Mayors' Council endorsed the final draft Business Case and directed Management to submit it to senior government for approval. The draft Business Case describes the full Surrey to Langley project, and recommends construction in stages consistent with available funding. Stage 1 extends SkyTrain approximately 7 kilometers from King George to Fleetwood with four new stations at a cost of \$1.63 billion. Stage 1 will be delivered by TransLink using a Design Build Finance (DBF) procurement model.

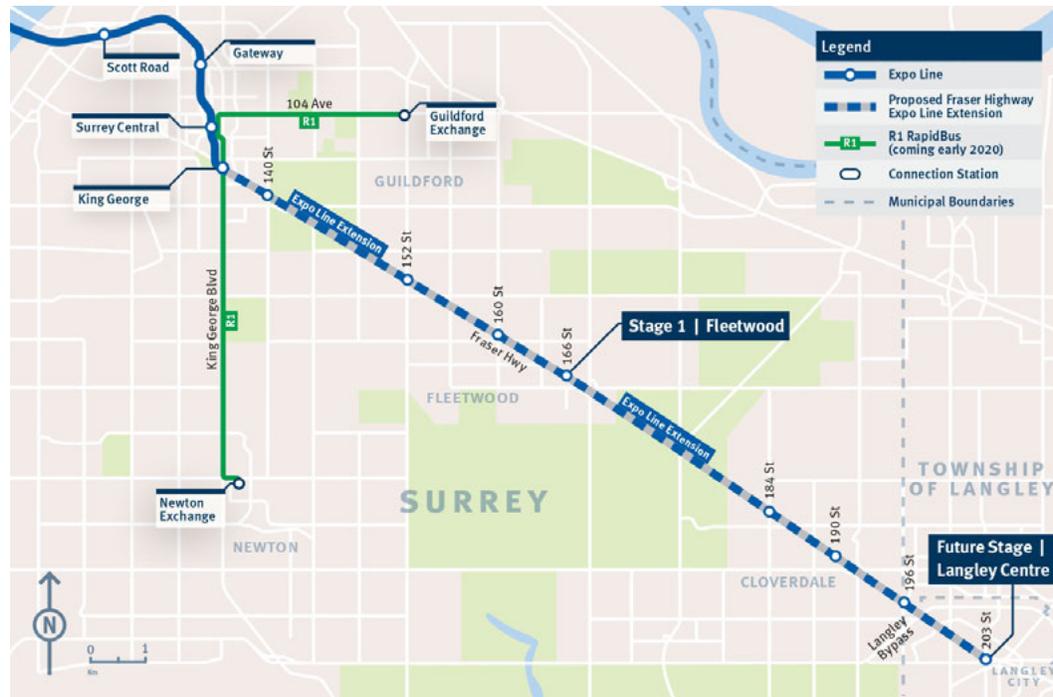


Figure 1 – Proposed extensions with stages and station locations

Stage 1 implementation is expected to be funded as part of the Invest in Canada Infrastructure Program (ICIP). Eligible costs within ICIP are funded 40% by Canada, 40% by British Columbia and 20% by the Region (specific project contributions vary). In addition to Business Case approval by the Federal and Provincial governments, Stage 1 requires TransLink Board and Mayors' Council approval through an enabling Investment Plan. Further to approval, a procurement process (approximately 18 months in duration) would be launched, followed by construction, testing and commissioning (approximately 4 years in duration).

DISCUSSION

Project development work to prepare for project procurement is generally complete or on-track to be complete in the coming weeks. Ongoing activities include:

- Preparing the procurement documents including a request for qualifications, request for proposal, and draft project agreement;
- Refining the reference design concept;
- Negotiating a Municipal Access Agreement with the City of Surrey;
- Coordinating with BC Hydro on the design of transmission tower relocations at two locations;
- Finalizing the project environmental screening review;
- Preparing specific project approval documentation for internal capital project approval; and
- Coordinating with parallel projects including those being delivered in the Expo and Millennium Line Upgrade Program (EMUP) and the Broadway Subway Project.

Approval Status

Under the requirements of the *South Coast British Columbia Transportation Authority Act* (SCBCTA Act), major capital projects over \$50 million must be included in a fully-funded Investment Plan. Originally the SLS Project was to be advanced under the “Phase Two Update” Investment Plan, targeted for approval in July 2020.

The onset of the COVID-19 pandemic in March 2020 prevented the preparation of a July 2020 Investment Plan due to the pandemic’s unprecedented financial impacts and consequent uncertainties in projecting future revenues.

To develop and approve the next Investment Plan, TransLink will need to reset its projected revenues and expenditures for the upcoming ten-year period, confirm available senior government funding, recapitalize its depleted reserves and re-prioritize the existing capital plan. The MOU signed between TransLink and the Province on June 25, 2020 identifies the importance of the SLS project and confirms the parties intention to working together to understand how the project fits into the recovery and rebuilding strategy for the regional transportation system. Management continues to work with Senior Government to secure project and funding approval.

Communications

The project public affairs plan includes elected official briefings, meetings with key stakeholders, First Nations engagement, and multiple opportunities for public input. Two rounds of public engagement are complete. A third phase of public engagement is planned for September/October 2020. This engagement round will provide an opportunity to provide information on the project design, environmental screening review, traffic management, and business access plans amongst other matters. The engagement approach is being updated to comply with public health directives and will primarily rely on online surveys, an online open house, and a telephone town hall to provide project information and gather input.

TO: Board of Directors

FROM: Geoff Cross, Vice President, Transportation Planning and Policy

DATE: September 22, 2020

SUBJECT: Transport 2050: COVID-19 Impacts and Opportunities – Update on Near Term Actions

EXECUTIVE SUMMARY

In June 2020, the Board received a report titled “Transport 2050: COVID-19 Impacts and Opportunities” which described the impact that COVID-19 has had on the region’s transportation and land use objectives. This report builds upon that previous report with a proposed list of concrete actions for TransLink to consider in the near term.

These actions address six key observations on the impact of the pandemic on the way we move in this region and are bundled into the following strategies: (1) Rebuild transit ridership, (2) Supporting walking and cycling, (3) Tackling increased driving, (4) Supporting Remote Work and Remote Learning Post-Pandemic, (5) Ensuring e-commerce is delivered smartly and with less impact, and (6) Mitigating the effects of unemployment.

All of the near-term actions identified within this report are consistent with TransLink and regional policy objectives. Management is seeking endorsement from the Board of Directors to continue to advance these near-term actions as part of the TransLink 2021 budgeting process.

PURPOSE

The purpose of this report is to provide an update to a report presented to the Board in June 2020 titled “Transport 2050: COVID-19 Impacts and Opportunities” identifying more specific work items for endorsement by the Board of Directors.

BACKGROUND

In June 2020, the Board received a report titled “Transport 2050: COVID-19 Impacts and Opportunities” which described the impact that COVID-19 has had on the region’s transportation and land use objectives. This report highlighted the need to proactively seize this temporary window of openness to change to accelerate the positive pandemic impacts that support our region’s long-held city-building and sustainable transportation objectives and to mitigate the negative impacts that run counter to our region’s goals.

Over the summer, TransLink staff have been identifying possible near-term actions which are achievable within the next one to three years and which support the goals of TransLink’s long-range strategic plan (Transport 2050). Municipal staff, through the Regional Agency Advisory, participated in a workshop as part of this process, to provide their input and ideas, many of which are captured in this report.

DISCUSSION

This report outlines six key observations on the impact of the pandemic on the way we move in this region and identifies possible concrete actions for TransLink to consider in the near term.

These six observations are:

1. Reduced transit ridership
2. Increased walking and cycling
3. Increased driving
4. Increased remote work and remote learning
5. Increased e-commerce
6. Increased unemployment & household financial strain

Rebuilding transit ridership

Transit ridership is down due to physical distancing guidance / proximity anxiety, increase in work-from-home, higher unemployment, and less overall travel & activity. While ridership is slowly returning, some factors may have long-lasting impacts.

A Customer Experience Action Plan 2.0 is currently being developed by TransLink which will identify key actions to rebuild ridership over the next year.

Additionally, since June, TransLink has assessed near-term opportunities for improving travel times for bus customers, as a way to ensure that bus travel times are competitive with cars and to mitigate the impacts of increased driving and congestion that's observed during the pandemic. A report titled "Improving Travel Times for Bus Customers: Bus Priority Rapid Response Assessment" was presented to the Mayors' Council on July 31. The assessment identified dozens of near-term opportunities to reduce delay for bus customers, using bus priority measures such as: bus priority lanes, bus bulbs, tactical street or intersection changes, and bus stop balancing. All identified opportunities are deemed to be technically feasible and appropriate considering the local context. The opportunities include many potential win-wins to benefit bus customers while increasing space for walking, parking, or other potential street uses such as patios that support public health objectives and the vitality of local businesses.

Since the June report, TransLink staff has worked with municipal partners to advance the opportunities identified in the Bus Priority Rapid Response Assessment and several projects are planned to be delivered in 2020.

Further work is currently underway with municipal partners and expected to be complete in 2021, including further bus stop balancing initiatives, pending the results of the pilot, and delivering the remaining near-term bus priority opportunities.

Supporting Walking and Cycling

As more people work from home, discretionary trips are easier to make locally on foot or bicycle and is encouraged as a safe, physically distanced activity. This has led to record bike sales across Canada, mostly fueled by novice cyclists. This creates an opportunity to create new habits of using active modes for transportation in a new segment of the population. Near-term initiatives to support this could include:

- **Build out infrastructure for active modes:** Infrastructure is key to uptake of active modes, and at this critical period, there is likely to be greater support for building out cycling and walking networks. Some near-term actions could include:
 - Supporting municipalities (through funding, increased cost-share, and planning/design support) to rapidly deploy slow streets through tactical urbanism.
 - Creation of 3-5 cycling showcases in the region. This action would involve rapid deployment of separated bikeway networks and bike parking within three to five Urban Centres in the region.
 - Identifying 3-5 Major Bikeway Network corridors that are "low hanging fruit" for completing, and fund rapid deployment to complete segment with either permanent or temporary (tactical) infrastructure.
 - Increasing BICCS/WITT funding (or cost share percentage) and promote awareness of funded projects.
 - Funding for pedestrian safety improvements addressing worst intersections for pedestrian collisions within Urban Centres.
 - Advocating to the Province for new funding to build more cycling infrastructure, such as AAA routes, secured bike parking, e-bike charging, and tactical (low-cost) interventions. In particular, funding to support infrastructure for students and youth walking and cycling to school and other destinations is critical post-pandemic.
 - Coordinate with municipalities on deploying more slow speed zones in urban centres across the region.
- **E-bike training, sharing and incentives:** E-bikes offer a commuting solution which is physically distanced. Actions to grow e-bike use could include:
 - Provide e-bike training and education. As a new technology, many residents will have not experienced e-bikes. Although delivering in-person training may not be possible, other forms of marketing or awareness building campaigns could be introduced. This action should be co-delivered with municipalities and non-profit organizations.
 - Advocate for BC Clean Energy Vehicle (CEV) rebate program to be expanded to include e-bikes. This program currently provides point of sale rebates for electric vehicles. Consider advocating to the Province for a program that supports low income residents to access e-bikes.
 - Facilitate e-bike/e-scooter sharing across the region through active coordination of municipal initiatives to introduce e-bike and e-scooter sharing systems. Coordination could include elements such as data standards, boundary conditions, operating rules, and pricing/cost.
- **Invest in data collection** to track use of active modes.

Tackling Increased Driving

Driving has and will likely continue to experience an uptick as people return to work but are concerned about health and safety. Some former transit riders are bringing insured vehicles out of storage or buying vehicles for commuting; and this has raised significant concerns of new habits which will be hard to break,

particularly once a capital investment has been made. The outcome could be increased congestion and emissions in the recovery period, as more workers return to work. Actions to address this trend may be grouped into several categories:

- **Increase access to a vehicle without needing to own one:** Vehicle ownership is strongly correlated with high vehicle kilometers travelled; whereas shared vehicle ownership or access (such as through car share, taxis or ride-hailing) naturally limits use due to the pay per use model. Metro Vancouver already has a long-standing car share industry, a growing ride-hailing market, plus a longstanding taxi sector. However, this solution might not be currently accessible to everyone in the region. Some potential actions to support these sectors as an alternative to owning a vehicle include:
 - Partner with industry to co-promote solutions and increase access to membership (e.g., for non-English speakers, newer drivers, etc.).
 - Work with municipalities to allocate more free or low-cost on-street parking for car share vehicles, particularly in neighborhoods that are underserved.
 - Advance digital solutions that allow for easy transition between modes (such as expanding TransLink’s mobility-as-a-service pilot).
 - Increase availability of vanpool and carpools. Build upon the work already initiated by TransLink through its vanpool program and through a carpool campaign to reach more riders as an alternative to driving a personal vehicle.
- **Support vehicle electrification:** Once a vehicle is purchased, it has an active lifetime of close to fifteen years. To support climate goals, it is important to encourage new vehicles entering the fleet to be as low emissions as possible. Some near-term actions to support this include:
 - Advocate for provincial zero emissions vehicle (ZEV) mandate to be accelerated and expanded to include more vehicle classes (namely, medium and heavy-duty vehicles). Currently, the ZEV mandate requires ZEVs for 10% of light-duty vehicle sales by 2025, 30% by 2030, and 100% by 2040. In Q3 of 2019, ZEV sales already reached 10% in BC, indicating that accelerating the timelines for 2025 and 2030 may be achievable.
 - Advocate for Provincial right-to-charge legislation which guarantees fair access to electric vehicle charging for condo-dwellers, who make up about half of Metro Vancouver residents.
 - Explore electric vehicle charging at TransLink Park and Rides.
- **Create financial disincentives to drive in peak conditions:** Low gas prices and changes to insurance premiums, may make driving potentially more attractive. A number of North American cities are exploring new pricing mechanisms to discourage driving in peak high traffic conditions. A near-term action may be to:
 - **Partner with a municipality to undertake a voluntary pilot to understand impacts and effectiveness of mobility pricing, or a Low Emissions Zone.** As mobility pricing is a relatively new concept, a pilot or demonstration project can play an important role in providing a proof-of-concept and identifying implementation and design issues which would need to be addressed before a broader policy could be advanced.

- **Work with municipalities to develop a regional approach to on-street parking allocation and pricing.**

Supporting Remote Work and Remote Learning Post-Pandemic

Physical distancing guidance has rapidly accelerated digital and remote work technologies, cultural acceptance, and policies resulting in less commuting. Although telecommuting is proving to be effective today, there is work to do today to ensure that it continues post-pandemic. Some near-term initiatives could include:

- **Address policy barriers to supporting remote work:** Identify policy barriers to remote work and advocate to the appropriate governing bodies to address those. For example, there may be barriers within WorkSafe policies, Canadian and Provincial Tax Codes, etc.
- **Create incentives to encourage remote work:** Advocate for tax credits, grants or other forms of incentives can support employers by offsetting costs associated with underutilized office space and increased expenses to support employees working from home.
- **Work with employers to encourage remote work:** Undertake an info campaign on employer cost savings of employees working remotely, and societal savings of people working remotely.
- **Gather spatial data on remote work** patterns to support transit service allocation and manage negative impacts (e.g., empty office buildings).
- **Work with cities to expand free public Wi-Fi network** across the region.

Ensuring e-commerce is delivered smartly and with less impact

Physical distancing guidance has rapidly accelerated e-commerce – which has the potential to reduce overall trips if effective regulations (e.g. road usage charging) are in place. Absent effective regulation, e-commerce may increase overall trips and contribute to continued decline of brick-and-mortar retail. A number of initiatives could take place today to better understand the impact of e-commerce and mitigate some of the negative effects.

- **Work with municipalities to regulate the urban freight delivery sector through street and traffic bylaws,** in lockstep with regulations on ride-hailing, to support goals such as congestion mitigation, incentivizing low emissions and right-sized deliveries, and better curb management.
- **Increase access to urban freight deliveries by biking, walking or transit,** through efforts such as increasing the number of Pigeon Boxes at TransLink stations.
- **Pilot, with municipalities or at TransLink stations, digitally managed curbs** across the region. A pilot can inform needs of both the physical and digital realm.
- **Pilot an e-freight hub with industry and municipality** where vehicles can transfer to low emissions, right-sized or active mode delivery vehicles for last mile distribution.

Mitigating the effects of unemployment

Physical distancing requirements over the past few months have led to a significant slowdown in consumer spending (particularly in service-oriented sectors), which is anticipated to have long lasting economic impacts in this region. As of July 2020, unemployment in BC was at 11%; significantly higher than the same time last year (4.4%). Depending on the duration of the pandemic, BC could experience

another recession / depression over the next few years. A key impact of high unemployment will be greater difficulty accessing transportation for many of the region's residents. Near-term initiatives which can address the challenges created by high levels of unemployment include:

- **Ensuring that transit remains affordable.** TransLink has already deferred a fare increase planned for July 2020 and the Mayors' Council will consider further deferment on October 1. Beyond deferring fare increase, ensuring that transit has a more sustainable funding source that does not depend as heavily on fare revenues is critical, particularly if there remains a need to keep transit vehicle occupancy levels low due to COVID-19.
- **Advocate to the province for free or discounted transit passes for low income individuals.** These could potentially be distributed through partners, such as non-profits or BC Housing. Consider linking free or discounted transit passes to other programs, such as Canada Emergency Response Benefit (CERB) or provincial or federal employment program. A more comprehensive system that involves Universal Basic Mobility coverage could be explored with the Province.
- **Prioritize quick-build transit infrastructure projects** to support economy recovery in the region.

Analysis of Alternatives

Management is seeking endorsement from the Board to continue to advance all of these near-term actions as part of the TransLink 2021 budgeting process, or, alternatively, focus on a subset of these actions based on Board input.

Financial Impacts

The near-term actions that are identified within this report and which receive endorsement for further exploration by the Board would be evaluated as part of TransLink's 2021 budgeting and prioritization process. As part of this prioritization process, these near-term actions would need to demonstrate how they fit with the Board endorsed-TL21 objectives. Actions which meet the TL21 objectives will then be considered as part of the budget process to ensure efficient resourcing.

Conclusion

Management recommends that all the near-term actions identified within this report are consistent with TransLink and regional policy objectives and should be explored further.